Polish Family and Fertility Survey: a user's guide

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Veröffentlichungsversion / Published Version
Arbeitspapier / working paper

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Polish Family and Fertility Survey

A User's Guide

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in cooperation with

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Arbeitspapier Nr. 42

Warsaw and Bremen, 1996

Preface

This working paper is a result of the collaboration between researchers of the Sfb-project B6 "Household Dynamics and Social Inequalities - An International Comparison" and the Institute of Statistics and Demography, Warsaw School of Economics, Poland.

The Polish Fertility and Family Survey (PFFS) provides retrospective longitudinal data on a number of processes in the life course of individuals, families and households. It includes nationally representative data on education, labor force participation, migration, partnership formation, changing family composition and housing. Social scientists, in particular demographers, sociologist, and economists, can make use of this unique data source in addressing a number of fundamental questions on patterns and determinants of human behavior. Particularly important is that the longitudinal nature of the data allows assessing changes in these processes over time, and explaining how social change and individual life course are interrelated.

This paper has several purposes. First, it should provide basic information on the goals of the PFFS survey and explain the data collection principles. This is particularly important for "secondary" researchers who were not responsible for directing "primary" data collection. Brief review of the study design, sampling plan, and field procedures should provide the background for an informed secondary analysis. Topics covered in the study and the list of variables available within specific sections will also be presented.

Second, special attention will be given to the longitudinal nature of the PFFS and the methods that allow analyzing this type of data. Basic principles of event history analysis, as well as general information on managing event-oriented data structures, should help beginners in this new research area to better understand the conceptual issues involved, and gain confidence in applying event history analysis to their own research.

Third, and most important, this User's Guide should provide help in practical research work with the PFFS. The reader will be introduced to the computer program TDA, designed by Götz Rohwer, which makes the use of a broad range of event history analysis techniques simple and convenient. The PFFS files have been conveniently stored in a compressed archive form. The section on data files and their structure supplies researchers with the necessary tools to assess variables needed for the analysis. In addition, several practical examples on specific research questions will show how empirical analysis has been conducted using TDA. Examples include TDA command files that manipulate the data set and perform the analysis, as well as outputs and a brief interpretation of results. Thus, readers who have access to the PFFS data set are given the opportunity to easily run and modify the application examples on their own personal computers. At a next step, researchers can apply the acquired knowledge to their own specific research questions.

I hope that this guide will serve as a useful tool, enabling a broader exploration of data from the Polish Fertility and Family Survey.

Prof. Dr. Walter Heinz
Chair, Special Collaborative Programme No. 186

Acknowledgements

The Polish co-authors of *Polish Family and Fertility Survey - A User's Guide*, Ewa Fratczak and Irena Kowalska, would like to express their gratitude to Professor Hans-Peter Blossfeld, Dr. Götz Rohwer and Dr. Sonja Drobnič.

Our cooperation began during the „International Training Seminar on Event History Analysis" that took place in Geneva from August 15 - 26, 1994. The seminar was jointly organized by the Population Activities Unit (PAU), DEAP, ECE, UN and Laboratoire de Demographie Economique et Sociale of the Genève University. Basic objective of the seminar was the transfer of skills and expertise in event history analysis to researchers who will later become actively involved in the FFS cross-country in-depth analysis to be coordinated by the PAU (aims defined by Erik Klijzing, FFS Project Manager and Miroslav Macura, Chief of the Population Activities Unit).

Lecturers at the workshop on Event History Analysis in Geneva were Professor Hans-Peter Blossfeld and Dr. Götz Rohwer. Inspired by the lecturers' knowledge and the way they presented the theory and application of event history analysis, we did our best to transform the seminar discussion into a cooperation.

In fact, cooperation was possible, thanks to the Polish participation in the international project on „Household Dynamics and Social Inequalities", conducted at the Sonderforschungsbereich 186 at Bremen University. Within this project, an analysis of the „Interdependence of Married Couples' Employment Careers" was carried out on the basis of Polish FFS data. We are grateful for the support received from SfB 186.

We would like to thank Dr. Götz Rohwer for his enormous work in processing the source database from the Polish Family and Fertility Survey (PFFS) and creating a database specific for the Transition Data Analysis (TDA) package as well as for his meritorious work and discussion. Our thanks also go to Dr. Sonja Drobnič and Professor Hans-Peter Blossfeld for their contributions to our joint project, scientific discussion and friendliness.

We hope that the present *Polish Family and Fertility Survey - A User's Guide* is a good example of the international cooperation in dissemination of information about event history analysis methods. Moreover, it promotes the TDA package that was created by Götz Rohwer. In our opinion, TDA is one of the best programs in the field of event history analysis and dynamic modeling. Our Guide also promotes the ideas which were put forth during the workshop held in Geneva in 1994.

We wish to take this opportunity to thank Professor Jerzy Z. Holzer, Director of the Institute of Statistics and Demography, for his decision to send us to the Geneva workshop and - last but not least - the organizers of the workshop, Dr. Erik Klijzing and Dr. Miroslav Macura, for inviting us.

Ewa Fratczak and Irena Kowalska

Contents

Chapter 1
Introduction

In this chapter, Section 1.1 briefly describes the study design and sample frame. Sections 1.2 and 1.3 give some information about topics included in the survey and variables.

1.1 Study Design and Sample Frame

Poland is one of the countries in the „Fertility and Family Surveys in the Countries of the ECE Region" project, proposed by the Population Activities Unit (PAU) of the Economic Commission for Europe (ECE). The Polish survey was carried out in 1991, i.e. in a period of important demographic changes and an early stage of socio-economic system transformation.

The Polish Family and Fertility Survey (PFFS) followed the recommendations of the Population Activities Unit for „Standard Recode Files" to a large extent. However, there are some specific characteristics of the PFFS: (1) The basic sampling units are dwelling units that may include several households and families; (2) if a family consists of two partners, then both partners (wife and husband) have been interviewed; (3) only women were asked questions referring to their fertility history; (4) there were no direct questions about sterilization which is only allowed for medical reasons in Poland.

The PFFS was carried out in November and December 1991 by the Institute of Statistics and Demography of Warsaw School of Economics, in cooperation with the Department of Social and Demographic Research of The Central Statistical Office. The sampling units were drawn on the basis of the 1988 National Population Census. The final sample consisted of 4313 households and 8544 individuals living in the selected dwelling units.

Two separate questionnaires were used in the PFFS study: the Form A questionnaire covered the household level, and Form B questionnaire was given to individual members of these households. A single member of a household – as a rule the male adult head – served as a sole respondent for the household questionnaire. This respondent provided information about the household, family structure, and household characteristics. At the next step, all members of a household aged 18–49 were interviewed individually with the Form B questionnaire. This restricted age range reflects the main focus of the survey – namely, fertility issues. However, in the case of couples where one partner was older than 49 years, this person was interviewed as well.

It should be mentioned that the response rate was very high: only 3.5 percent of selected households and 5.2 percent of individuals refused to participate in the survey.

According to PAU recommendations, the Polish FFS included some intimate questions concerning partnerships and sexual life histories. To avoid non-response on such questions, the questionnaire provided the possibility for answering *it is my private matter*.

More information on sampling procedures and data collection, as well as basic tabulations from the PFFS, are presented in the *FFS Standard Country Report for Poland* (Holzer and Kowalska, 1995).

In the following we briefly describe the topics covered by the questionnaire, both in form A for households and form B for individuals. A complete description of all variables can be found in Appendix A.

1.2 Household-Level Variables

Form A of the questionnaire comprises two parts: (a) the description of household and family characteristics, and (b) information on household members.

Household and Family Characteristics. The following household-level variables describe the characteristics of a household:

- total number of persons in household
- persons arriving to the household after its establishment, by birth, by marriage, by other reasons
- number of employed members of the household
- number of members with income from non-employment sources
- number of members without own income
- type of living arrangement
- number of families in the household
- number of members needing special care
- main source of maintenance
- size of agricultural farm
- total area of arable land
- ownership of dwelling unit
- socio-economic status of the household

Household Members. The following information is collected on each member of a household, regardless of whether this person has been interviewed with Form B interview (age 18 – 49) or not.

- relationship to the household head
- relationship to family head
- sex
- birth date
- marital status
- main activity

- main source of maintenance
- month and year of arrival to household
- type of arrival to household (birth, marriage, other reasons)

1.3 Individual-Level Variables

Individual-level variables can be broadly divided into cross-sectional variables which describe an individual at one point of time and the time-varying life-history variables based on retrospective historical information. Form B, Section I, includes basic information on the respondent and his/her partner.

Basic information on both respondent and his/her partner:

- sex
- month and year of birth
- size of birthplace
- level of completed education
- occupational activity
- main job: economic sector, socio-occupational position and position at work (supervisory/subordinate)
- additional job: economic sector, socio-occupational position and position at work (supervisory/subordinate)
- month and year of parents' birth
- completed educational level of parents
- socio-occupational position of parents
- number of siblings
- place of residence in childhood
- family living arrangement in childhood
- marital status of parents
- timing of leaving home
- religiosity and church attendance

Educational career: Individual's educational career is depicted as a sequence of educational episodes. Each episode is described by the following information:

- timing of school enrollment
- type of school
- timing of school completion
- educational level
- work during schooling
- educational intentions within the next two years

Employment Career: Individual's employment career is depicted as a sequence of episodes of occupational activity. Each episode is described by the following information:

- timing of job start
- sector of employment (private / state)
- socio-occupational group
- position at work (supervisory/subordinate)
- full-time/part-time work
- work hours per week
- work during weekends
- attitudes and reasons for working
- timing of job end (given by the date of starting a new job or starting a period of inactivity)

Occupational Inactivity: Inactivity episodes are only assessed for respondents who were previously employed:

- timing of inactivity start
- reasons for work break
- source of maintenance during inactivity
- intentions concerning employment within the next six months

Residential mobility is also described in the life-history form:

- timing of arrival to a place of residence
- size of place of residence
- main reason for moving
- intentions concerning residential mobility within the next two years

Dwelling history:

- timing of arrival to a dwelling
- size of dwelling
- number of rooms
- household size
- ownership status
- intentions concerning housing mobility within the next two years

Family and Children.

- number of children
- desired number of children

Further questions on childbearing refer only to women:

- number of pregnancies

- number of live births
- number of children alive
- number of resident children
- pregnancies ended in still birth and miscarriage
- intentions and timing of future childbearing
- reasons for not intending to have more children
- ideal number of children
- reasons for having children
- reasons for not having children

The following information is provided in a life-history form for each pregnancy:

- timing of pregnancy
- duration of pregnancy
- pregnancy wanted/ not wanted
- contraceptive use
- pregnancy outcome

The following information is provided in life-history form for each pregnancy that ended in live birth or still birth:

- time and type of delivery
- number of newborns
- participation in birth preparatory courses
- reasons for having a child
- sex of child
- birthweight
- if child already dead: timing, reason
- childcare arrangements
- child's school attendance
- child's employment
- co-residence with a child
- child's home leaving: timing and reason
- child's place of residence

Partnerships:

- number and timing of marriages
- ever cohabited
- number of cohabitations
- expected changes in partnership within the next two years
- importance of factors for a steady partnership
- importance of factors for a partnership break-up

- attitudes towards marriage, parenthood, partnership, career
- distribution of work in the household

The following information is provided in a life-history form for each partnership:

- form of partnership
- timing of start of relationship
- marital status of partners at the start of relationship
- partner having children at the start of relationship
- factors determining the relationship start
- employment situation and source of maintenance at the relationship start
- timing of living together with a partner
- intimate relationship
- number of pregnancies and births by cumulative partnership duration
- timing and form of relationship end
- factors determining the relationship end

Contraception:

- age at first sexual intercourse and start of regular sexual life
- knowledge about contraception methods
- use of contraception methods
- reasons for not using specific contraception methods
- opinion about sterilization
- outcome in case of unwanted pregnancy
- attitudes towards abortion
- knowledge about fertilization methods

1.4 PFFS and the UN Standard Recode File

In an attempt to provide as complete a set of information on PFFS as possible, we also briefly refer to the modified version of the PFFS prepared for the purposes of international comparison, although we stress that this paper deals with the original or "raw" PFFS data files.

Within the project of *Fertility and Family Surveys in Countries of the ECE Region*, the United Nations Population Activities Unit of the Economic Commission for Europe compiled comparable survey data on fertility and the family from several countries and is conducting a series of national and cross-national studies on the basis of these data. Data for Poland came from the PFFS. For the purposes of comparative analysis and the preparation of the Standard Country Report, national data have been modified and archived in the form of FFS Standard Recode File (SRF) at a central ECE FFS data base in Geneva.

The Polish questionnaire did not contain all the questions that were recommended in the standard questionnaire prepared by the Population Activities Unit. The following differences between the Polish and the standard questionnaire are of main importance:

1. In the PFFS, all persons aged 18–49 living in the selected household were interviewed, instead of only one person per household.
2. Three sections were completely omitted in the PFFS:

   S71-module: Values and Beliefs

   S91-module: Population Policy Acceptance

   S92-module: Population Policy Acceptance (continued)

3. Some questions were omitted or changed:

   S11 – variables V122-V124 concerning the date of buying the apartment/house.

   S20 – instead of variables V211-V215 concerning the intention to cohabit or to marry, PFFS contains information on all expected changes in partnership.

   S50 – information on sterilization is not available in the PFFS, as sterilization is allowed only for medical reasons in Poland.

   S51 – PFFS did not include the contraception history with detailed dates; respondents were only asked about contraception before and after each pregnancy.

   S81 – PFFS does not provide information on the educational subject-matter (V806), and the information on employment status, i.e. employee, self-employed, unpaid family worker (V817).

More detailed information about the PAU recommendations can be found in the following publications:

1. Standard Recode Files and Standard Country Reports. Published by the Population Activities Unit of the Economic Commission for Europe, United Nations. Geneva 1993.
2. Questionnaire and Codebook for the Fertility and Family Surveys in Countries of the ECE Region. Published by the Population Activities Unit of the Economic Commission for Europe, United Nations. New York 1992.

Chapter 2

Organization of Data

This chapter describes the data files containing the information from the PFFS. Section 2.1 describes the basic data files; Section 2.2 explains how we have created a compressed data archive to be used with the computer program TDA (Transition Data Analysis). Examples of how to use this data archive will be given in Chapter 4.

2.1 The Data Files

The PFFS data are stored in 10 separate files. Basic information about the file names and the number of records and variables are given in Table 2.1. The files are plain ASCII files with variables stored in a fixed format. Names of variables, columns occupied by each variable, as well as labels and values for variables, can be found in the description of variables in Appendix A.

Tab. 2.1 The basic PFFS data files

File Name	Records	Variables	Contents
anka1.d	4313	27	households: structure
anka2.d	16717	19	households: members
ankb1.d	8544	100	individuals: basic information
ankb2.ds	18190	15	individuals: educational career
ankb31.ds	15121	20	individuals: employment career
ankb32.ds	3623	17	individuals: inactivity career
ankb4.ds	15006	12	individuals: regional mobility
ankb5.ds	22135	16	individuals: residential mobility
ankb6.ds	7974	41	individuals: fertility
ankb7.ds	17100	34	individuals: partnerships

We will now provide some information about each of these 10 data files.

anka1.d This data file is organized according to households, meaning that each record corresponds to one household. The households are identified by household ID numbers (`HHID`), consecutively numbered from 1 to 4313.

anka2.d This data files contains information about all household members, identified by a person number (`A2PID`). This ID number consists of 6 digits: the first four digits contain the household ID number, the last two digits distinguish the individuals within a household. Altogether, the number of household members is 16717. In addition, there is a variable `A2HHID` which links these individuals to the appropriate households.

ankb1.d This data file contains basic information about 8544 interviewed household members. There is one record for each individual. Two important identifying variables are: `B1PID`, the person ID number, and `B1HHID`, the household ID number.

ankb2.ds This is an event history data file where each record corresponds to one event in the educational career. Note that each individual can contribute more than one record (event) to this data file. Basic identifying variables are: `B2PID` (person ID number) and `B2HHID` (household ID number).

ankb31.ds This is an event history data file where each record corresponds to one event in the employment career. Each individual can contribute more than one record (event) to this data file. Basic identifying variables are: `B31PID` (person ID number) and `B31HHID` (household ID number).

ankb32.ds This is an event history data file where each record corresponds to one event in the inactivity career, that is, periods out of the labor market. Each individual can contribute more than one record (event) to this data file. Basic identifying variables are: `B32PID` (person ID number) and `B32HHID` (household ID number).

ankb4.ds This is an event history data file where each record corresponds to one regional mobility event. Each time when a person moved from a village into a town, or between towns, a new spell is generated. Basic identifying variables are: `B4PID` (person ID number) and `B4HHID` (household ID number).

ankb5.ds This is an event history data file where each record corresponds to one event in residential mobility, that is, moving between dwellings. Basic identifying variables are: `B5PID` (person ID number) and `B5HHID` (household ID number).

ankb6.ds This is an event history data file to record pregnancies and information on children. Note that only women were interviewed about fertility issues.[1] Basic identifying variables are: `B6PID` (person ID number) and `B6HHID` (household ID number).

ankb7.ds This is an event history data file to record partnerships. Each record corresponds to one partnership. Again, each individual can contribute more than one record (event) to this data file. Basic identifying variables are: `B7PID` (person ID number) and `B7HHID` (household ID number).

All these data files are plain ASCII files and can be used with any available software. However, to use these data with TDA, it is more convenient (although not necessary) to store the files into a single compressed data archive. This will be described in the next section.

---

[1] In a few cases, however, these questions have been answered by men.

2.2 The Data Archive

To create a compressed data archive, we used the program ZOO, a general purpose archive program, written by Rahul Dhesi and freely available on many different computer platforms, including DOS and UNIX workstations. The archive which we named `pffs.zoo` has been created in three steps.

Step 1: Compressing the data file. In a first step, the data files were compressed and put into the archive. This was done with the following ZOO commands:[2]

```
zoo ah pffs.zoo anka1.d
...
zoo ah pffs.zoo ankb7.ds
```

Step 2: Adding a variable description file. ZOO is a general purpose archive program and not specifically concerned with data files consisting of data records and variables. To use it as a TDA data archive, one has to add a *variable description file* containing information about all variables that can possibly be retrieved from the archive.

The variable description file for our data archive will be called `pffs.var`. It is shown in Appendix A. For each variable, TDA needs the following information:

1. The variable's name.[3]
2. A logical file number of the data file the variable belongs to (simply 1 – 10 for our ten data files).
3. The offset defining where the values of a variable begin in the records of a data file. Note that offsets begin with zero for the first physical column in a record.
4. Then comes the number of columns occupied by the variable. It suffices to give the number of columns since TDA will automatically recognize whether there are integer or floating point values.
5. Optionally, one can add a *variable label*. This is optional and only used by TDA for informational purposes in print outs. Any non-blank string, following the definition of the number of columns (LEN) until the end of the current record, is regarded as a variable label.
6. As a further option, one can add *value labels*. This can be any text immediately following the definition of a variable in subsequent records that must however begin with at least one blank character.

Having created the variable description file, it must be added to the archive. The ZOO command is

```
zoo ah pffs.zoo pffs.var
```

---

[2] A full description of ZOO and its many different commands is in a manual, `zoo.man`, that is part of every ZOO distribution.

[3] Note that variable names must begin with an upper case letter and are generally case sensitive, that is, TDA distinguishes upper and lower case letters.

Box 2.1 Contents of the data archive `pffs.zoo`

```
Archive pffs.zoo:
Length    CF  Size Now  Date      Time
--------  --- --------  --------- --------
  552064  87%    74545   5 May 95 12:48:26+457278   anka1.d
 1270492  83%   223086   5 May 95 16:43:22+457278   anka2.d
 6877920  85%  1043381   5 May 95 17:29:26+457278   ankb1.d
 1194559  84%   187891   9 Feb 96 11:11:52+457279   ankb31.ds
  253610  80%    51291   9 Feb 96 12:06:18+457279   ankb32.ds
 2069100  88%   254694   9 Feb 96 13:43:32+457279   ankb7.ds
 1196100  88%   143027  10 Feb 96 17:38:24+457279   ankb6.ds
 1527315  85%   224037  10 Feb 96 17:46:04+457279   ankb5.ds
  825330  83%   136318  10 Feb 96 17:50:38+457279   ankb4.ds
 1236920  86%   174952  10 Feb 96 17:54:52+457279   ankb2.ds
  127480  86%    18255  11 Feb 96 13:41:54+457279   pffs.var
--------  --- --------  --------- --------
17130890  85%  2531477    11 files
```

Box 2.2 Archive description file `pffs.des`

```
# pffs.des
# archive description file for pffs.zoo

  pffs.zoo

 1 anka1.d   1  128   4313  27
 2 anka2.d   1   76  16717  19
 3 ankb1.d   1  805   8544 100
 4 ankb2.ds  1   68  18190  15
 5 ankb31.ds 1   79  15121  20
 6 ankb32.ds 1   70   3623  17
 7 ankb4.ds  1   55  15006  12
 8 ankb5.ds  1   69  22135  16
 9 ankb6.ds  1  150   7974  41
10 ankb7.ds  1  121  17100  34

99 pffs.var  2    0   3123   0
```

This command compresses the file `pffs.var` and then adds the compressed file to the archive `pffs.zoo`. The archive now contains all that is required by TDA to retrieve data: the data files and a description of its variables.

To inspect the contents of the archive, one can use the ZOO command

```
zoo l pffs.zoo
```

The resulting table of contents is shown in Box 2.1.

Step 3: Creating an archive description file. The final step is to create an *archive description file* that describes the archive to be used with TDA. This file contains two pieces of information (see Box 2.2). First, the name of the data archive, optionally preceded by a path. And second, a description of each file that

is contained in the archive *and* should be recognized by TDA.[4] There is one record for each file, containing: (1) The logical file number. (2) the name of the file. (3) The type of the file (1 = data file, 2 = variable description file). (4) The physical length (in bytes) of the file's logical records (or zero if the records have variable length). (5) The number of logical records in the file. (6) The number of variables in the file.[5]

Checking the data archive. Before a data archive is used for the first time (and whenever the archive is updated with additional data files or with a modified variable description file), it should be checked whether it can be correctly used with TDA. The TDA command to perform such a check is

```
tda arcd=pffs.des arcc
```

TDA is invoked, in this example, with two arguments (commands). The first command is `arcd=pffs.des` telling TDA that it shall use a file with the name `pffs.des` as an archive description file. (This `arcd` command must always be given when TDA shall use a data archive.) The second command is `arcc` requesting that the archive defined with the `arcd` command shall be checked. The check consists of the following steps: (1) TDA tries to open the archive description file and tries to interpret all entries in this file. (2) TDA tries to open the ZOO archive defined in the archive description file. (3) TDA tries to read (and internally decompress) all files from the archive that are defined in the archive description file. If any errors occur, or if there are any discrepancies between the file's description in the archive description file and what is found while extracting the files from the archive, an error message will be given in the program's standard output. Otherwise the program ends with the message „no errors found".

2.3 Using the Data Archive

There are two possibilities on how to use the data archive. First, it is possible to extract the data files from the archive and then use these files as plain ASCII data files with any available software. For example, if we want to extract the first file, the following command can be used:

```
zoo x pffs.zoo ankal.d
```

However, it is also possible to use the data archive with TDA directly. One can retrieve individual variables from the compressed archive, merge variables from different data files, and store them in an internal data matrix. This data matrix can then be used for further statistical calculations. Some simple examples are given below; a more substantive application is discussed in Chapter 4.

Example 2.1 In a first example, we show how to extract two variables from the data file `ankb1.d`: `D1P01R` (sex of respondent), and `D1P04R` (highest level of completed education). We will create a TDA command file, called `prog1.cf`, shown in Box 2.3. Note that variable names in TDA must start with an upper case letter.

---

[4] A TDA data archive may contain additional files that are not recognized by TDA.

[5] This last entry is only for informational purposes and not checked by TDA.

Box 2.3 Example command file `prog1.cf`

```
# prog1.cf
# example command file for pffs.zoo

arcd = pffs.des;     open access to data archive

# define requested variables

SEX = A:D1P01R;      define SEX by reference to variable D1P01R
EDU = A:D1P04R;      define EDU by reference to variable D1P04R

# make a cross-tab of SEX and EDU

freq = SEX,EDU;
```

Box 2.4 Part of output from command file `prog1.cf`

```
Frequency distribution: freq=SEX,EDU

Index SEX EDU  Frequency   Pct   Cumulated   Pct
-------------------------------------------------
    1   1   1     905.00  10.59     905.00  10.59
    2   1   2    1992.00  23.31    2897.00  33.91
    3   1   3     169.00   1.98    3066.00  35.88
    4   1   4     818.00   9.57    3884.00  45.46
    5   1   5      83.00   0.97    3967.00  46.43
    6   1   6     310.00   3.63    4277.00  50.06
    7   1   7      27.00   0.32    4304.00  50.37
    8   1   8      31.00   0.36    4335.00  50.74
    9   2   1     951.00  11.13    5286.00  61.87
   10   2   2    1179.00  13.80    6465.00  75.67
   11   2   3     589.00   6.89    7054.00  82.56
   12   2   4     878.00  10.28    7932.00  92.84
   13   2   5     287.00   3.36    8219.00  96.20
   14   2   6     285.00   3.34    8504.00  99.53
   15   2   7      20.00   0.23    8524.00  99.77
   16   2   8      20.00   0.23    8544.00 100.00
-------------------------------------------------
Sum              8544.00 100.00
```

Lines that start with # only contain commentaries and are not read by TDA. In addition, commentaries can be written on command lines, after a semicolon.

The command file `prog1.cf` is executed by the following command:

```
tda cf=prog1.cf > out
```

where the output is redirected to a file called `out`. Part of this output is shown in Box 2.4.

Note that it is possible to use arbitrary variable names on the left-hand side of a variable definition. On the right-hand side one must, of course, use the variable's name as defined in the variable description file of the data archive.

Box 2.5 Example command file `prog2.cf`

```
# prog2.cf
# example command file for pffs.zoo

section = "first section to read data from ankb1.d";

arcd = pffs.des;    open access to data archive

# define requested variables

PID  = A:B1PID;     define PID by reference to variable B1PID
HHID = A:B1HHID;    define HHID by reference to variable B1HHID
SEX  = A:D1P01R;    define SEX by reference to variable D1P01R
EDU  = A:D1P04R;    define EDU by reference to variable D1P04R

section = "second section to read data from anka1.d";

HHID1 = A:HHID;     define HHID1 by reference to variable HHID
SESG  = A:D1P017;   define SESG by reference to variable D1P017
match = HHID1,HHID; merge new data by matching household ID in both files

# make a cross-tab of SEX and SESG

freq = SEX,SESG;
```

Box 2.6 Part of output from command file `prog2.cf`

```
Frequency distribution: freq=SEX,SESG

Index SEX SESG  Frequency   Pct   Cumulated   Pct
-------------------------------------------------
    1   1    1    2464.00  28.84    2464.00  28.84
    2   1    2     381.00   4.46    2845.00  33.30
    3   1    3     463.00   5.42    3308.00  38.72
    4   1    4     549.00   6.43    3857.00  45.14
    5   1    5     362.00   4.24    4219.00  49.38
    6   1    6     116.00   1.36    4335.00  50.74
    7   2    1    2556.00  29.92    6891.00  80.65
    8   2    2     289.00   3.38    7180.00  84.04
    9   2    3     379.00   4.44    7559.00  88.47
   10   2    4     474.00   5.55    8033.00  94.02
   11   2    5     367.00   4.30    8400.00  98.31
   12   2    6     144.00   1.69    8544.00 100.00
-------------------------------------------------
Sum              8544.00 100.00
```

Example 2.2 In a second example, we show how to merge data from different data files. We again begin with the individuals in data file `ankb1.d` and then add information about the socio-economic group of the household (variable `D1P017`) from data file `anka1.d`. The command file is now `prog2.cf` shown in Box 2.5. The resulting cross-tabulation of sex and socio-economic group is shown in Box 2.6.

Chapter 3

Event History Data Structures

This chapter discusses event history data structures. A more complete overview can be found in Blossfeld and Rohwer (1995).

Event history analysis studies *transitions* across a set of discrete states, including the length of *time intervals* between entry to and exit from specific states. The basic analytical framework is a state space and a time axis. The choice of the *time axis* or *clock* (e.g. age, experience, marriage duration, etc.) used in the analysis must be based on theoretical considerations and affects the statistical model. An *episode*, *spell*, *waiting time*, or *duration* – terms that are used interchangeably – is the time span a unit of analysis (e.g. an individual) spends in a specific state. The *states* are *discrete* and usually small in number. The definition of a set of possible states, called the *state space* $\mathcal{Y}$, is also dependent on substantive considerations. One should also note here that a small change in the focus of the substantive issue in question, leading to a new definition of the state space, often requires a fundamental reorganization of the event history data file.

The most restricted event history model is based on a process with only a *single episode* and *two states* (one *origin* and one *destination* state). An example can be the duration of *first* marriage until the end of the marriage, for whatever reason. In this case, each individual who entered into first marriage (origin state) started an episode, which could be terminated by a transition to the destination state "not married anymore." In the *single episode* case, each unit of analysis that entered into the origin state is represented by one episode. If more than one destination state exists, we refer to these models as *multistate models*. Models for the special case with a single origin state but two or more destination states are also called *models with competing events* or *risks*. For example, a housewife might become "unemployed" (meaning entering into the state "looking for work"), or start being "full-time" or "part-time employed." If more than one event is possible (i.e. if there are repeated events or transitions over the observation period), we use the term *multi-episode models*.

Most of the basic concepts for the one-episode and one-event case can simply be extended and applied to more complex situations with *repeated episodes* and/or *competing events*.

Event history data are more complex than cross-sectional ones because for each episode information about an *origin state* and a *destination state*, as well as the *starting* and *ending times*, are given. In most studies, there are also *repeated episodes* from *various parallel processes* (e.g. job, marital, or residential histories, etc.) at *different levels* (e.g. job history of an individual, histories of the firm where the individual worked at the mesolevel, and/or structural changes in the labor market at the macrolevel) for each unit of analysis.

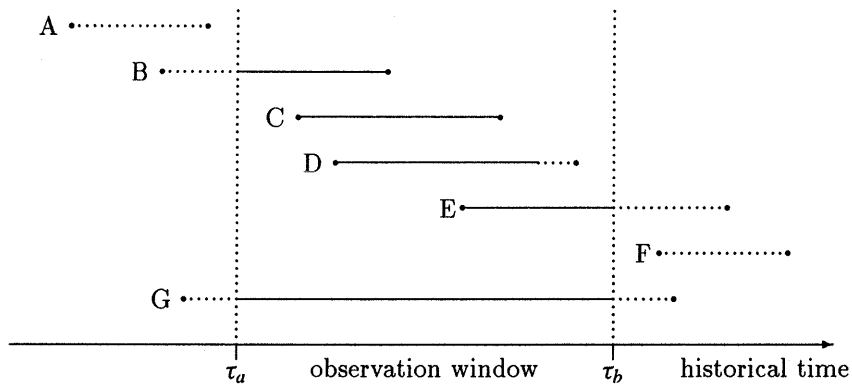

Figure 3.1 Types of censoring in an observation window.

If one has a sample of $i = 1, \ldots, N$ multistate-multi-episode data, a complete description of the data[1] is given by

$$(u_i, m_i, o_i, d_i, s_i, t_i, x_i) \qquad i = 1, \ldots, N$$

where u_i is the identification number of the individual or any other unit of analysis the ith episode belongs to; m_i is the serial number of the episode; o_i is the origin state, the state held during the episode until the ending time; d_i is the destination state defined as the state reached at the ending time of the episode; and s_i and t_i are the starting and ending times, respectively. In addition, there is a covariate vector x_i associated with the episode. We always assume that the starting and ending times are coded such that the difference $t_i - s_i$ is the duration of the episode, and is positive and greater than zero. There is also an ordering of the episodes for each individual, given by the set of serial numbers of the episodes. Although it is not necessary for serial numbers to be contiguous, it is required that the starting time of an episode be not less than the ending time of a previous episode.

Observations of event histories are very often *censored*. Censoring occurs when the information about the duration in the origin state is incompletely recorded. Figure 3.1 gives examples of different types of censoring created by an observation window. The horizontal axis indicates historical time and the observation period is usually of finite length, with the beginning and end denoted by τ_a and τ_b, respectively.

- *Episode A* is fully censored on the left, which means that the starting and ending times of this spell are located before the beginning of the observation window. Left censoring is normally a difficult problem because it is not possible to take the effects of the unknown episodes into account. It is only easy to cope with, if the assumption of a Markov process is justified (i.e. if the transition rates do not depend on the duration in the origin state).
- *Episode B* is partially censored on the left, so that the length of time a subject has already spent in the origin state is unkown. In this case we have the same problems as for A-type episodes.

[1] A complete history of state occupancies and times of changes is often called a "sample path".

- *Episode C* is complete. There is no censoring on the left or right.
- *Episode D* is a special case. This episode is censored on the right within the observation window. If the censoring is a result of a random process, then event history analysis methods can take these episodes into account. Technically speaking, it can be treated in the same way as Episode E. However, this type of censoring might occur because of attrition or missing data in a panel study. Such dropouts or missing data are normally not random, and the characteristics of the lost individuals are very often related to the process under study. Such selectivity bias creates problems and cannot easily be corrected in an event history analysis.
- *Episode E* is right censored because the observation is terminated at the right-hand side of the observation window. This type of censoring typically occurs in life course studies at the time of the retrospective interview, or in panel studies at the time of the last panel wave. Because the end of the observation window, τ_b, is normally determined independently from the substantive process under study, this type of right censoring is unproblematic.
- *Episode F* is completely censored on the right. Entry into and exit from the duration occurs after the observation period. This type of censoring generally takes place in retrospective life history studies, where individuals of various birth cohorts are observed over different life spans. To avoid sample selection bias, such models have to take variables into account that control for the selection (by including birth cohort dummy variables, for example).
- *Episode G* represents a duration that is left and right censored. Such observations occur, for example, in panel studies that record job mobility. In such cases, one knows that a person is in a specific job at the first sweep and in the same job up to the second one, but one has no information about the actual beginning and ending times.

Chapter 4

Data Analysis Examples

It has already been shown how individual variables can be extracted from the data archive. In this chapter, we will provide further examples for analyzing the PFFS data. In particular, we will focus on the event history PFFS data and the data management for longitudinal analysis. Examples provided here are taken from an analysis of the interdependence of married couples' employment careers, carried out by Drobnič, Fratczak and Kowalska (1996). This study is embedded in an international project on „Household Dynamics and Social Inequalities," and has the objective to parallel a similar analysis conducted in Germany (Blossfeld, Drobnič, Rohwer 1996).

The purpose of the project is to explicitly link the dynamics of the family life cycle and spouses' resources with the career patterns of married couples. At the first stage, the focus is on the employment patterns of wives in the household context. The analysis requires the reconstruction of respondents' employment episodes and out-of-labor-market statuses (starting with the time of marriage and ending with a right censored observation at the time of interview), and the reconstruction of family events, such as marriage dates and births of children.

Data preparation for this study is complex and can, therefore, serve as an useful illustration for the management of individual variables and complete PFFS data files. Specifics of the data will be discussed and some pitfalls will be pointed out. Examples should encourage and help PFFS users to develop strategies in data management, particularly with more complex event-oriented parts of the dataset. It should be stressed, however, that examples are specific to the Couples' Career Project; some assumptions and solutions adapted in programs presented in this User's Guide may not be appropriate for investigating other research questions if they are not modified.

4.1 Employment and Inactivity Spells

In this section, we create an event history data file containing employment and inactivity spells. Since the necessary information is distributed across several different

Box 4.1.1 Example state space

```
0 : in education (starting at age 12)
1 : full time, or more than full time employment
2 : part time employment
3 : other forms of work
4 : unemployed
5 : education
6 : pension
7 : other forms of inactivity
9 : inactivity after completed education
```

Box 4.1.2 Command file `ep1.cf` to create data file `eh1.dat`

```
# ep1.cf
# preparing event history file for employment spells

# open access to data archive in block mode
arcd = pffs.des;
dblock(100) = B31PID;

# select only records with valid dates and states
isel = PO1Y[39,,91] . PO1M[1,,12] . PO5[1,,4];

B31PID [6.0] = A:B31PID;     respondent id
PO1Y   [2.0] = A:PO1Y;       year of job start
PO1M   [2.0] = A:PO1M;       month of job start
PO5    [2.0] = A:PO5;        employment status

# definition of state space
# ORG = 1 : full time, or more than full time
#       2 : part time
#       3 : other forms of work
ORG    [2.0] = if PO5[1,2] then 1 else if PO5[3] then 2 else 3;

DATE   [4.0] = 12 * PO1Y + PO1M; job start in century months

pdata  = eh1.dat;              print data to output file eh1.dat
keep   = B31PID, ORG,DATE;     keep only these variables
```

Box 4.1.3 First records of `eh1.dat`

```
ID  ORG DATE
------------
101  1   874
102  1   824
102  1  1046
201  1   871
201  1   907
202  1   895
301  1   899
301  3   966
301  3  1086
```

raw data files, we have to proceed in several steps. First, we have to decide about the state space and an appropriate time axis. We distinguish the states shown in Box 4.1.1. In the continuation of this example, it will become clear why certain states must be included in the state space. For the time axis we use century months, defined by

```
Century_Month = 12 * Calendar_Year + Month
```

where `Calendar_Year` is given by two digits. For example, December 1991 (the interview date) is coded as 1104 since `12 * 91 + 12 = 1104`.

Step 1: Employment Spells. We begin by creating a data file, `eh1.dat`, con-

Box 4.1.4 Command file `ep2.cf` to create data file `eh2.dat`

```
# ep2.cf
# preparing event history file for inactivity spells

# open access to data archive in block mode
arcd = pffs.des;
dblock(100) = B32PID;

# select only records with valid dates and states
isel = P10Y[44,,91] . P10M[1,,12] ;

B32PID [6.0] = A:B32PID;    respondent id
P10Y   [2.0] = A:P10Y;      year of inactivity start
P10M   [2.0] = A:P10M;      month of inactivity start
P111   [2.0] = A:P111;      first reason of inactivity
P131   [2.0] = A:P131;      first source of maintenance
P132   [2.0] = A:P132;      second source of maintenance

# definition of state space
# ORG = 4 : unemployed
#       5 : education
#       6 : pension
#       7 ; otherwise

ORG    [2.0] = if P111[1] . (P131[2] + P132[2]) then 4 else
               if P111[4] then 5 else
               if P131[3] then 6 else 7;

DATE   [4.0] = 12 * P10Y + P10M; inactivity start in century months

pdata  = eh2.dat;           print data to output file eh2.dat
keep   = B32PID, ORG,DATE;  keep only these variables
```

taining information about employment events, that is, each record corresponds to the beginning of an employment spell. The data file is created with command file `ep1.cf` shown in Box 4.1.2.

The output file, `eh1.dat`, contains 15092 records, each describing the beginning of an employment spell and the type of work. There are three variables: `ID` to identify an individual, `ORG` to describe the origin state of the employment spell, and `DATE` to record the starting time of the spell in century months. In Box 4.1.3, a few records from `eh1.dat` are presented. It can be seen that some individuals generated more than one employment episode.

Step 2: Inactivity Spells. The second step is to create a file with the beginning dates of inactivity spells. The basic information is in the raw data file `ankb32.ds`. Our data file will now be `eh2.dat` having the same structure as `eh1.dat`. The command file to create `eh2.dat` is `ep2.cf` shown in in Box 4.1.4.

In accordance with the objectives of the project, we wanted to identify inactivity spells when the respondent's main responsibility was housekeeping. However, it turned out that the data did not allow a straightforward classification of inactivity

Box 4.1.5 First records of `eh2.dat`

```
ID  ORG DATE
-----------
102  7  980
202  7  951
302  7  963
402  7 1012
501  7 1025
501  7 1062
```

statuses. Therefore, we only separated episodes of unemployment, episodes when a person was in education, and episodes when he/she received a pension, i.e. was retired. When excluding these states, we defined a homogeneous inactivity status, including all the remaining factors that respondents referred to as reasons for their inactivity.

The output data file `eh2.dat` contains 3590 records, each one describing the beginning of an inactivity spell. First records are shown in Box 4.1.5.

Step 3: Starting with Age 12. When organizing data for the project on couples' careers, it became evident that the data organization in raw data files exhibits certain problems which hinder the construction of a continuous employment/non-activity career over the life course of individuals. The reason is that information on inactivity was only collected for individuals who have previously been employed and who at some point interrupted their employment. However, no information on reasons for inactivity and source of maintainance during the inactivity is available for respondents who have never been employed (yet). This poses a serious problem in our analysis. Our research question does not allow us to simply exclude never employed persons because inactivity is a substantively important state in the analysis. Also, since we distinguished between unemployment, schooling, retirement, and „other" inactivity spells, we could not simply assign one uniform inactivity spell to all persons.

Instead, we adopted the following strategy: we start event histories for each individual at age 12 and assign the value 0 to this first spell. This means that starting at age 12 a person is in education. Next, we retrieve information about the timing of completed education, if available, and assign the value 9 to this state.

To get the additional information, we create two more data files, `eh3.dat` and `eh4.dat`. Both are organized in the same way as `eh1.dat` and `eh2.dat`.

However, before we can create these data files we need consistent information about the first event after completed education, that is, we need for each person the first event in one of the data files `eh1.dat` and `eh2.dat`. Therefore, we create an additional data file, `ep1_2.dat`, containing this information. The command file to create this data file is `ep1_2.cf`, shown in Box 4.1.6. The first records of the output file are shown in Box 4.1.7.

Now we can use `ep1_2.dat` to create the two additional data files. The command file is `ep3.cf`, shown in Box 4.1.8. Output file `eh3.dat` contains 8544 records (one

Box 4.1.6 Command file `ep1_2.cf` to create data files `ep1_2.dat`

```
# ep1_2.cf
# command file to combine eh1.dat and eh2.dat

section;
dfile = eh1.dat,eh2.dat;          access to data files
noc = 20000;                      max number of cases

ID   [6.0] = c1;                  define variables
ORG  [2.0] = c2;
DATE[4.0] = c3;

dsort = ID, DATE;                 sort
pdata = tmp;                      write to temporary file

section;
clear;                            delete current data matrix

section;
dfile = tmp;                      access to data files
dblock(100) = ID;                 block mode
noc = 20000;

ID   [6.0] = c1;                  define variables
ORG  [2.0] = c2;
DATE[4.0] = c3;

SEL [2.0] = ne(ID,pre(ID));
tsel = SEL;                       select cases

pdata = ep1_2.dat;                write output file ep1_2.dat
keep = ID,ORG,DATE;               keep these variables
```

Box 4.1.7 First records of `ep1_2.dat`

```
101  1  874
102  1  824
201  1  871
202  1  895
301  1  899
302  1  896
401  1  788
402  1  933
```

for each individual), `eh4.dat` contains 6094 records. The first records of both files are shown in Box 4.1.9.

Let us recapitulate briefly the research steps taken until now. Due to specifics of data collection, it is not possible to reconstruct a continuous employment/non-activity career directly from data for all respondents. Therefore, we had to proceed in several steps and create a set of event history partial data sets which will later have to be combined. The following partial event histories have been created:

- `eh1.dat`: individual's employment spells – date of beginning and type of work;

- `eh2.dat`: individual's inactivity spells – date of beginning and type of inactivity;
- `ep1_2.dat`: individual's first employment or inactivity spell, whichever comes first – date of beginning and type;
- `eh3.dat`: individual's educational spell at age 12 – date of spell start and type;
- `eh4.dat`: spell indicating that an individual has completed his/her education – date of spell start and type.

Step 4: Retrieving Sex, Birth Date, and Date of Completed Education. We will add information about sex, birth date, and date of completed information. These variables will later be used in the analysis. However, they also serve as controls in the process of data generation. We simply create a data file, `gen1.dat`, with a single record for each individual containing an identification number and the required variables. The command file is `ep4.cf`, shown in Box 4.1.10. Box 4.1.11 shows the first records of the new data file.

Step 5: Combining the Data Files. The next step is to combine the previously generated data files into a new data file and to sort according to ID number and event dates. The command file, `ep5.cf`, is shown in Box 4.1.12. The output file, `eh5.dat`, contains 33320 records (events); the first records are shown in Box 4.1.13.

In this file, we can see, for example, that a man with ID=101 was born in 592 (April 1949), and completed his education in 870 (June 1972). His first spell starts in 736 at the age of 12 and has origin state 0 (schooling). His second spell with a value 9 starts at time 870 when he completed his education. Four months later, in 874, he starts working full-time. No inactivity spells or other

Step 6: Creating an Event History File. The final step is to create an event history file based on `eh5.dat`. A specific characteristic of the PFFS data is that respondents were not directly asked about ending times for particular episodes. Therefore, we have to assume that the information on various states and their timing is complete and that the beginning of the next record indicates the end of the previous spell, when ordered sequentially according to starting times. The command file in which we assign ending times and destination states to spells is `ep6.cf`, shown in Box 4.1.14. The output data file, `eh6.dat`, again contains 33320 records (spells). The first records are shown in Box 4.1.15. We can see that the last spell of an individual always ends at the time of interview (December 1991 = 1104), and is right censored, i.e. destination state is the same as origin state.

Box 4.1.8 Command file `ep3.cf` to create data files `eh3.dat` and `eh4.dat`

```
# ep3.cf
# command file to create eh3.dat and eh4.dat

section = "get variables from ankb2.ds";
arcd = pffs.des;

B2PID  [6.0] = A:B2PID;  person id
B2NRK  [2.0] = A:B2NRK;  spell number
B2P03M [2.0] = A:B2P03M; month of completing educ.
B2P03Y [2.0] = A:B2P03Y; year of completing educ.
SEL    [2.0] = eq(B2NRK,bnrec); last educ. spell, end date
vsel = SEL[1];    select only last spell

# if valid dates on completed education then recode to century months,
# if education is still lasting take interview date, otherwise -1
# note: interview date in century months is 1104
ENDEDUC [4.0] = if B2P03M[1,,12] . B2P03Y[36,,91] then 12*B2P03Y+B2P03M
                else if B2P03M[0] . B2P03Y[0] then 1104 else -1;

section = "add variables from ankb1.d";
B1PID [6.0] = A:B1PID;  respondent id
BDY   [2.0] = A:D1P02RR; year of respondent's birth
BDM   [2.0] = A:D1P02RM; month of respondent's birth
BD    [4.0] = if BDY[22,,74] . BDM[1,,12] then 12 * BDY + BDM else -1;
match = B1PID,B2PID;

section = "merge data from ep1_2.dat";
dfile = ep1_2.dat;  access to data file
ID = c1;            define variables
ORG = c2;
DATE = c3;
match = ID,B2PID;   how to match new variables to existing data matrix

section = "create data file eh3.dat";
# print a single education spell for all respondents
# beginning at age 12 (in century month)
AGE12 [4.0] = if gt(BD,0) then BD + 144 else -1;
ORG1 = 0;       define a new variable for the state
pdata = eh3.dat;            print to output data file eh3.dat
keep = B2PID,ORG1,AGE12;    keep only these variables

section = "create data file eh4.dat";
# if ENDEDUC is valid and less than starting time of first employment/
# inactivity spell create a separate inactivity spell beginning with
# end of education.

# temporary case selection
tsel = gt(ENDEDUC,0) . lt(ENDEDUC,DATE);
ORG2 = 9;       define a new variable for the state
pdata = eh4.dat;            print to output file eh4.dat
keep = B2PID,ORG2,ENDEDUC;  keep only these variables
```

Box 4.1.9 First records of `eh3.dat` and `eh4.dat`

`eh3.dat`

ID	ORG	DATE
101	0	736
102	0	754
201	0	764
202	0	801
301	0	795
302	0	791
401	0	687
402	0	821

`eh4.dat`

ID	ORG	DATE
101	9	870
102	9	822
201	9	870
202	9	894
301	9	894
302	9	894
402	9	930
502	9	918

Box 4.1.10 Command file `ep4.cf` to create data files `gen1.dat`

```
# ep4.cf
# get sex, birth date, and date of completed education

section = "get variables from ankb2.ds";

arcd = pffs.des;
dblock(100) = B2PID;

B2PID  [6.0] = A:B2PID;  person id
B2NRK  [2.0] = A:B2NRK;  spell number
B2P03M [2.0] = A:B2P03M; month of completing educ.
B2P03Y [2.0] = A:B2P03Y; year of completing educ.
SEL    [2.0] = eq(B2NRK,bnrec); last educ. spell, end date

vsel=SEL[1];    select only last spell

# if valid dates on completed education then recode to century months,
# if education is still lasting take interview date, otherwise -1

ENDEDUC [4.0] = if B2P03M[1,,12] . B2P03Y[36,,91] then 12*B2P03Y+B2P03M
                else if B2P03M[0] . B2P03Y[0] then 1104 else -1;

section = "add variables from ankb1.d";

B1PID [6.0] = A:B1PID;  respondent id
SEX   [2.0] = A:D1P01R; sex of respondent
BDY   [2.0] = A:D1P02RR; year of respondent's birth
BDM   [2.0] = A:D1P02RM; month of respondent's birth
BD    [4.0] = if BDY[22,,74] . BDM[1,,12] then 12 * BDY + BDM else -1;
match = B1PID,B2PID;

pdata = gen1.dat;              print to output file gen1.dat
keep  = B2PID,SEX,BD,ENDEDUC;  keep only these variables
```

Box 4.1.11 First records of `gen1.dat`

```
ID  SEX  BD  ENDEDUC
--------------------
101  1  592    870
102  2  610    822
201  1  620    870
202  2  657    894
301  1  651    894
302  2  647    894
401  1  543    882
402  2  677    930
501  1  667    918
502  2  665    918
```

Box 4.1.12 Command file `ep5.cf` to create data file `eh5.dat`

```
# ep5.cf
# combining eh1.dat, eh2.dat, eh3.dat, eh4.dat, and gen1.dat

section = "reading eh1.dat,...,eh4.dat";

dfile = eh1.dat,eh2.dat,eh3.dat,eh4.dat;
noc = 40000;
ID   [6.0] = c1;      respondent id
ORG  [2.0] = c2;      origin state
DATE[4.0] = c3;       starting time

section = "merging gen1.dat";

dfile = gen1.dat;
ID1      [6.0] = c1;      respondent's id
SEX      [2.0] = c2;      sex
BD       [4.0] = c3;      birth date
ENDEDUC [4.0] = c4;       end of education

match = ID1,ID;

# sort data and print to eh5.dat;
dsort = ID,DATE;
pdata = eh5.dat;
keep  = ID,SEX,BD,ENDEDUC,ORG,DATE;
```

Box 4.1.13 First records of **eh5.dat**

ID	SEX	BD	ENDEDUC	ORG	DATE
101	1	592	870	0	736
101	1	592	870	9	870
101	1	592	870	1	874
102	2	610	822	0	754
102	2	610	822	9	822
102	2	610	822	1	824
102	2	610	822	7	980
102	2	610	822	1	1046
201	1	620	870	0	764
201	1	620	870	9	870
201	1	620	870	1	871
201	1	620	870	1	907
202	2	657	894	0	801
202	2	657	894	9	894
202	2	657	894	1	895
202	2	657	894	7	951
301	1	651	894	0	795
301	1	651	894	9	894
301	1	651	894	1	899
301	1	651	894	3	966
301	1	651	894	3	1086
302	2	647	894	0	791
302	2	647	894	9	894
302	2	647	894	1	896
302	2	647	894	7	963
401	1	543	882	0	687
401	1	543	882	1	788
401	1	543	882	1	832
401	1	543	882	3	1065

Box 4.1.14 Command file `ep6.cf` to create data file `eh6.dat`

```
# ep6.cf
# creating an event history data file

dfile = eh5.dat;
noc = 35000;
dblock(100) = ID;

ID      [6.0] = c1;      respondent id
SEX     [2.0] = c2;      sex of respondent
BD      [4.0] = c3;      birth date
ENDEDUC[4.0] = c4;       date of completed education
ORG     [2.0] = c5;      origin state
TS      [4.0] = c6;      starting time
ORG1    [2.0] = lag(ORG,1); origin state of next record
TS1     [4.0] = lag(TS,1); starting time of next record

SN      [2.0] = brec;    spell number
SNN     [2.0] = bnrec;   number of spells for one person
DES     [2.0] = if eq(brec,bnrec) then ORG else ORG1;
TF      [4.0] = if eq(brec,bnrec) then 1104 else TS1;

pdata = eh6.dat;
keep = ID,SNN,SN,ORG,DES,TS,TF,SEX,BD,ENDEDUC;
```

Box 4.1.15 First records of `eh6.dat`

ID	SNN	SN	ORG	DES	TS	TF	SEX	BD	ENDEDUC
101	3	1	0	9	736	870	1	592	870
101	3	2	9	1	870	874	1	592	870
101	3	3	1	1	874	1104	1	592	870
102	5	1	0	9	754	822	2	610	822
102	5	2	9	1	822	824	2	610	822
102	5	3	1	7	824	980	2	610	822
102	5	4	7	1	980	1046	2	610	822
102	5	5	1	1	1046	1104	2	610	822
201	4	1	0	9	764	870	1	620	870
201	4	2	9	1	870	871	1	620	870
201	4	3	1	1	871	907	1	620	870
201	4	4	1	1	907	1104	1	620	870
202	4	1	0	9	801	894	2	657	894
202	4	2	9	1	894	895	2	657	894
202	4	3	1	7	895	951	2	657	894
202	4	4	7	7	951	1104	2	657	894
301	5	1	0	9	795	894	1	651	894
301	5	2	9	1	894	899	1	651	894
301	5	3	1	3	899	966	1	651	894
301	5	4	3	3	966	1086	1	651	894
301	5	5	3	3	1086	1104	1	651	894

4.2 Marriage and Children

At the next stage, we will identify the marriage and childbirth history for women. As before, we will proceed in several steps.

Step 1: Marital History. Individuals' marital history will be reconstructed, using data on partnerships in ankb7.ds. In this example, we will record a complete

Box 4.2.1 Command file `m1.cf` to create data file `marr1.dat`

```
section = "retrieve data from ankb7.ds";
arcd = pffs.des;
dblock(100)   = B7PID;
isel = B7P04[5];       select only cases with at least one marriage
B7PID  <4>[6.0] = A:B7PID  ; (10) person ID number
B7NRK  <1>[2.0] = A:B7NRK  ; (10) sequence number of record for person
B7P04  <1>[2.0] = A:B7P04  ; (10) form of partnership
B7P05M <1>[2.0] = A:B7P05M ; (10) month of partnership start
B7P05R <1>[2.0] = A:B7P05R ; (10) year of partnership start
B7P18M <1>[2.0] = A:B7P18M ; (10) month of partnership end
B7P18R <1>[2.0] = A:B7P18R ; (10) year of partnership end
SEL = eq(brec,1);       indicator for first record for each person
# get marriage dates
MY [4.0] = if B7P05R[44,,91] then B7P05R else 0;
MM [4.0] = if B7P05M[ 1,,12] then B7P05M else 7;
MD [4.0] = if MY then 12 * MY + MM else 0;
# first, second, and third marriage date
MD1 [4.0] = MD;
MD2 [4.0] = lag(MD,1);
MD3 [4.0] = lag(MD,2);
# recode no marriage to large value
MDD1[4.0] = if MD1 then MD1 else 9991;
MDD2[4.0] = if MD2 then MD2 else 9993;
MDD3[4.0] = if MD3 then MD3 else 9995;
# get separation dates (separation, divorce, death)
SY  [4.0] = if B7P18R[45,,91] then B7P18R else 0;
SM  [4.0] = if B7P18M[ 1,,12] then B7P18M else 7;
SD  [4.0] = if SY then 12 * SY + SM else 0;
# first, second, and third separation date
SD1 [4.0] = SD;
SD2 [4.0] = lag(SD,1);
SD3 [4.0] = lag(SD,2);
# recode no separation to large value
SDD1[4.0] = if SD1 then SD1 else 9992;
SDD2[4.0] = if SD2 then SD2 else 9994;
SDD3[4.0] = if SD3 then SD3 else 9996;
# consistency check (CHECK = 1 for valid cases)
CHECK [1.0] = gt(SDD1,MDD1).gt(SDD2,MDD2).gt(SDD3,MDD3).
              ge(MDD2,SDD1).ge(MDD3,SDD2);

section = "select first record with valid information";
tsel = SEL . CHECK;
pdata = marr1.dat;      print to output file marr1.dat
keep  = B7PID,MDD1,SDD1,MDD2,SDD2,MDD3,SDD3;
```

Box 4.2.2 First records of `marr1.dat`

```
ID  MDD1 SDD1 MDD2 SDD2 MDD3 SDD3
-------------------------------
101  949 9992 9993 9994 9995 9996
102  949 9992 9993 9994 9995 9996
201  894 9992 9993 9994 9995 9996
202  894 9992 9993 9994 9995 9996
301  928 9992 9993 9994 9995 9996
302  928 9992 9993 9994 9995 9996
401  851 1006 1012 9994 9995 9996
402 1012 9992 9993 9994 9995 9996
501  949 9992 9993 9994 9995 9996
502  949 9992 9993 9994 9995 9996
601  940 9992 9993 9994 9995 9996
602  940 9992 9993 9994 9995 9996
```

marital history, i.e. the beginning and ending dates (separation, divorce or death of a partner) of all marriages. Command file is `m1.cf`, shown in Box 4.2.1. This command file produces a data file `marr1.dat`, first records of which are presented in Box 4.2.2.

Variables on timing of marriages and marriage dissolutions will later be used as time-varying covariates to split the employment/inactivity spells. Keeping this future step in data preparation in mind, we assign high values (starting with 9992) to marriage and dissolution dates if a person did not experience an event. In Box 4.2.2, we can see that the person with the `ID` number 101 married in 949, if measured in century months, and that this marriage was still lasting at the time of interview. Person 401, however, married for the first time in 851, and this marriage lasted until 1006. A second marriage started in 1012, and still continued at the time of interview; therefore, all subsequent dates on marriages and dissolutions were assigned values such as 9994, 9995, and 9996.

Step 2: Birth Dates of Children (only Women). Since no direct information on children's birth dates are available in the PFFS, we have to reconstruct the data from information on pregnancies and pregnancy outcomes in `ankb6.ds`. Questions on childbearing history were in principle answered only by women. Command file `m2.cf`, in which variables on children' birth dates in century months and the total number of children are reconstructed, is shown in Box 4.2.3. First records of the output data file `child1.dat` are shown in Box 4.2.4.

Box 4.2.3 Command file `m2.cf` to create data file `child1.dat`

```
# m2.cf
# Birth dates of children, only for women

# m1.cf
# marriage history for men and women

section = "retrieve variables from ankb6.ds";

arcd = pffs.des;
dblock(100) = PID;

# select only live births with valid dates
isel = B6P10R[44,,92] . B6P10M[1,,12] . B6P14[1];

PID    [6.0] = A:B6PID;     person id
B6P10R [2.0] = A:B6P10R;    end of pregnancy date: year
B6P10M [2.0] = A:B6P10M;    end of pregnancy date: month
B6P14  [2.0] = A:B6P14 ;    indicator for live birth

# create birth dates in century months
BD1 [4.0] = 12 * B6P10R + B6P10M;
BD2 [4.0] = lag(BD1,1);
BD3 [4.0] = lag(BD1,2);
BD4 [4.0] = lag(BD1,3);
BD5 [4.0] = lag(BD1,4);
BD6 [4.0] = lag(BD1,5);
BD7 [4.0] = lag(BD1,6);
BD8 [4.0] = lag(BD1,7);
BD9 [4.0] = lag(BD1,8);
BD10[4.0] = lag(BD1,9);

# create number of children
NRCH [2.0] = gt(BD1,0) + gt(BD2,0) + gt(BD3,0) + gt(BD4,0) +
             gt(BD5,0) + gt(BD6,0) + gt(BD7,0) + gt(BD8,0) +
             gt(BD9,0) + gt(BD10,0);

SEL = eq(brec,1);   indicator for first record

section = "add information about sex from ankb1.d";

B1PID [6.0] = A:B1PID;  respondent id
SEX   [2.0] = A:D1P01R; sex of respondent
match = B1PID,PID;

# freq = SEX,NRCH;  only for informational purposes

section = "select first record for women with at least one child";

tsel = SEL . SEX[2] . gt(NRCH,0);
pdata = child1.dat;    print data to output file child1.dat
keep  = PID,NRCH,BD1,BD2,BD3,BD4,BD5,BD6,BD7,BD8,BD9,BD10;
```

Box 4.2.4 First records of `child1.dat`

ID	NRCH	BD1	BD2	BD3	BD4	BD5	BD6	BD7	BD8	BD9	BD10
102	3	977	1004	1037	0	0	0	0	0	0	0
202	2	907	964	0	0	0	0	0	0	0	0
302	2	940	962	0	0	0	0	0	0	0	0
402	2	965	1024	0	0	0	0	0	0	0	0
502	2	953	1023	0	0	0	0	0	0	0	0
602	2	976	1045	0	0	0	0	0	0	0	0
701	1	1008	0	0	0	0	0	0	0	0	0
801	2	1020	1069	0	0	0	0	0	0	0	0
902	2	1036	1078	0	0	0	0	0	0	0	0
1102	1	1061	0	0	0	0	0	0	0	0	0
1302	2	941	964	0	0	0	0	0	0	0	0
1602	2	917	938	0	0	0	0	0	0	0	0
1902	3	800	846	903	0	0	0	0	0	0	0
2201	1	778	0	0	0	0	0	0	0	0	0
2301	1	905	0	0	0	0	0	0	0	0	0
2502	1	831	0	0	0	0	0	0	0	0	0
2702	1	931	0	0	0	0	0	0	0	0	0
2802	2	1014	1030	0	0	0	0	0	0	0	0

4.3 Adding Covariates to the Event History File

Now we add covariates for marriages dates and children to event history data file `eh6.dat`. This is done with command file `ehd1.cf` shown in Box 4.3.1. The new output data file is `ehd1.dat`. In this file, variables on marriage and childbirth dates are added to each employment/inactivity spell of a respondent. First records are shown in Box 4.3.2.

Marital status and the birth of children are time-dependent covariates. It is assumed that a change in these variables may have an effect on a likelihood of change in the employment/inactivity status. To test these assumptions, we have to split all the spells within which family-related changes occur at the time when these events happen. By splitting the spells, we are then able to update time-varying data, such as changes in marital status or the number of children in the family. Episode-splitting in TDA has to be done in two steps.

In a first step, we use command file `split1.cf` to split the data file. The command file is shown in Box 4.3.3. The output file is `split1.dat`, first records are shown in Box 4.3.4. Here, additional sub-spells are created at time points in which changes in marital status or child births occur. For example, the third spell for a woman with `ID` = 102, which started in full-time employment in time 824 and ended in 980 in inactivity (see Box 4.3.2.) is now divided into three sub-spells because marriage as well as the birth of a child occurred in the course of this spell, i.e. the woman marries in 949 and gives birth to a child in 977. Data organization for this respondent after splitting can be seen in Box 4.3.4.

Box 4.3.1 Command file **ehd1.cf** to create data file **ehd1.dat**

```
# ehd1.cf
# creating an event history data file based on eh6.dat
# and adding covariates from marr1.dat and child1.dat
# only for women.

section = "reading eh6.dat";

dfile = eh6.dat;
noc = 35000;
isel = c8[2];   select only women
ID      [6.0] = c1;     respondent id
SNN     [2.0] = c2;     number of spells for respondent
SN      [2.0] = c3;     spell number
ORG     [2.0] = c4;     origin state
DES     [2.0] = c5;     destination state
TS      [4.0] = c6;     starting time
TF      [4.0] = c7;     ending time
SEX     [2.0] = c8;     sex
BD      [4.0] = c9;     birth date
ENDEDUC [4.0] = c10;    date of completed education

section = "merging with marr1.dat";

dfile = marr1.dat;
ID1 [6.0] = c1;     respondent id
MD1 [4.0] = c2;     date of first marriage
SD1 [4.0] = c3;     date of first separation (divorce ...)
MD2 [4.0] = c4;     date of second marriage
SD2 [4.0] = c5;     date of second separation (divorce ...)
MD3 [4.0] = c6;     date of third marriage
SD3 [4.0] = c7;     date of third separation (divorce ...)
match = ID1,ID;

section = "merging with child1.dat";

dfile = child1.dat;
ID2  [6.0] = c1;    respondent id
NCH  [2.0] = c2;    number of children
BD1  [4.0] = c3;    birth date of 1st child
BD2  [4.0] = c4;    birth date of 2nd child
BD3  [4.0] = c5;    birth date of 3rd child
BD4  [4.0] = c6;    birth date of 4th child
BD5  [4.0] = c7;    birth date of 5th child
BD6  [4.0] = c8;    birth date of 6th child
BD7  [4.0] = c9;    birth date of 7th child
BD8  [4.0] = c10;   birth date of 8th child
BD9  [4.0] = c11;   birth date of 9th child
BD10 [4.0] = c12;   birth date of 10th child
match = ID2,ID;
pdata = ehd1.dat;
```

Box 4.3.2 First records of `ehd1.dat`

ID	TS	TF	BD	ID1	MD1	SD1	MD2	SD2	MD3	SD3	ID2	BD1	BD2	BD3
102 5 1 0 9	754	822 2	610 822	102	949	9992	9993	9994	9995	9996	102 3	977	1004	1037
102 5 2 9 1	822	824 2	610 822	102	949	9992	9993	9994	9995	9996	102 3	977	1004	1037
102 5 3 1 7	824	980 2	610 822	102	949	9992	9993	9994	9995	9996	102 3	977	1004	1037
102 5 4 7 1	980	1046 2	610 822	102	949	9992	9993	9994	9995	9996	102 3	977	1004	1037
102 5 5 1 1	1046	1104 2	610 822	102	949	9992	9993	9994	9995	9996	102 3	977	1004	1037
202 4 1 0 9	801	894 2	657 894	202	894	9992	9993	9994	9995	9996	202 2	907	964	0
202 4 2 9 1	894	895 2	657 894	202	894	9992	9993	9994	9995	9996	202 2	907	964	0
202 4 3 1 7	895	951 2	657 894	202	894	9992	9993	9994	9995	9996	202 2	907	964	0
202 4 4 7 7	951	1104 2	657 894	202	894	9992	9993	9994	9995	9996	202 2	907	964	0

In a second step we create a time-varying dummy variable for being married, and a time-varying variable on the number of children. The command file `split2.cf` is shown in Box 4.3.5. The new data file is `split2.dat`, first records are shown in Box 4.3.6. This is now our event history data file where sequential employment/inactivity spells have been split in such a way that all changes in marital status and the number of children are updated when they occur.

The covariate `MARR` takes value 1 when the respondent marries and keeps this value until the marriage lasts. In the event of divorce, separation, or partner's death, the covariate is again coded 0. Another time-varying covariate is „number of children", which changes its value every time a child is born. Note that the second and third columns in `split2.dat` show the total number and the serial number of spells. A women with ID=102 has generated five spells in her employment/inactivity career. We can see that both of her third and fourth spells have been split, each into three subspells at the point in time when her marital status or number of children changed.

Box 4.3.3 Command file `split1.cf` to create data file `split1.dat`

```
# split1.cf
# command file to split ehd1.dat according to marriage and
# separation dates, and birth of children.

dfile = ehd1.dat;           data file
noc = 16566;                (max.) number of cases

ID       [6.0] = c1;        define variables
SNN      [2.0] = c2;
SN       [2.0] = c3;
ORG      [2.0] = c4;
DES      [2.0] = c5;
TS       [4.0] = c6;
TF       [4.0] = c7;
SEX      [2.0] = c8;
BD       [4.0] = c9;
ENDEDUC [4.0] = c10;
ID1      [6.0] = c11;
MD1      [4.0] = c12;
SD1      [4.0] = c13;
MD2      [4.0] = c14;
SD2      [4.0] = c15;
MD3      [4.0] = c16;
SD3      [4.0] = c17;
ID2      [6.0] = c18;
NCH      [2.0] = c19;
BD1      [4.0] = c20;
BD2      [4.0] = c21;
BD3      [4.0] = c22;
BD4      [4.0] = c23;
BD5      [4.0] = c24;
BD6      [4.0] = c25;
BD7      [4.0] = c26;
BD8      [4.0] = c27;
BD9      [4.0] = c28;
BD10     [4.0] = c29;

# print data to output file split1.dat. While writing the output data
# split according to MD1,...,BD10, using an episode data structure
# defined by ORG,DES,TS,TF.

pdata = split1.dat;
rsplit(ORG,DES,TS,TF) = MD1,SD1,MD2,SD2,MD3,SD3,
                        BD1,BD2,BD3,BD4,BD5,BD6,BD7,BD8,BD9,BD10;
```

Box 4.3.4 First records of `split1.dat`

```
ID ORG DES TS   TF
-------------------------------------------------------------------------
102 0  9  754  822  2  610  822 .. 102  949 ... 102  3  977 1004 1037 ...
102 9  1  822  824  2  610  822 .. 102  949     102  3  977 1004 1037 ...
102 1  1  824  949  2  610  822    102  949     102  3  977 1004 1037 ...
102 1  1  949  977  2  610  822    102  949     102  3  977 1004 1037
102 1  7  977  980  2  610  822    102  949     102  3  977 1004 1037
102 7  7  980 1004  2  610  822    102  949     102  3  977 1004 1037
102 7  7 1004 1037  2  610  822    102  949     102  3  977 1004 1037
102 7  1 1037 1046  2  610  822    102  949     102  3  977 1004 1037
102 1  1 1046 1104  2  610  822    102  949     102  3  977 1004 1037
202 0  9  801  894  2  657  894    202  894     202  2  907  964    0
202 9  1  894  895  2  657  894    202  894     202  2  907  964    0
202 1  1  895  907  2  657  894    202  894     202  2  907  964    0
202 1  7  907  951  2  657  894    202  894     202  2  907  964    0
202 7  7  951  964  2  657  894    202  894     202  2  907  964    0
202 7  7  964 1104  2  657  894    202  894     202  2  907  964    0
```

Box 4.3.5 Command file `split2.cf` to create data file `split2.dat`

```
# split2.cf
# creating a new event history data file with time-dependent
# variables for being married and for number of children.

section = "creating the data";
dfile = split1.dat;      data file
dblock(100) = ID;        block mode
noc = 27000;             max number of records

ID       [6.0] = c1;          defining variables
SNN      [2.0] = c2;
SN       [2.0] = c3;
ORG      [2.0] = c4;
DES      [2.0] = c5;
TS       [4.0] = c6;
TF       [4.0] = c7;
SEX      [2.0] = c8;
BD       [4.0] = c9;
ENDEDUC [4.0] = c10;
ID1      [6.0] = c11;
MD1      [4.0] = c12;
SD1      [4.0] = c13;
MD2      [4.0] = c14;
SD2      [4.0] = c15;
MD3      [4.0] = c16;
SD3      [4.0] = c17;
ID2      [6.0] = c18;
NCH      [2.0] = c19;
```

Box 4.3.5 (continued) Command file `split2.cf`

```
BD1     [4.0] = c20;
BD2     [4.0] = c21;
BD3     [4.0] = c22;
BD4     [4.0] = c23;
BD5     [4.0] = c24;
BD6     [4.0] = c25;
BD7     [4.0] = c26;
BD8     [4.0] = c27;
BD9     [4.0] = c28;
BD10    [4.0] = c29;

# create time-dependent dummy variable
# MARR = 1 while being married
# MARR = 0 while not being married

MARR [2.0] = if le(MD1,TS) . gt(SD1,TS) +
               le(MD2,TS) . gt(SD2,TS) +
               le(MD3,TS) . gt(SD3,TS) then 1 else 0;

# create time-dependent variable to count number of children

NCHILD [2.0] = gt(BD1,0) . le(BD1,TS) +
               gt(BD2,0) . le(BD2,TS) +
               gt(BD3,0) . le(BD3,TS) +
               gt(BD4,0) . le(BD4,TS) +
               gt(BD5,0) . le(BD5,TS) +
               gt(BD6,0) . le(BD6,TS) +
               gt(BD7,0) . le(BD7,TS) +
               gt(BD8,0) . le(BD8,TS) +
               gt(BD9,0) . le(BD9,TS) +
               gt(BD10,0) . le(BD10,TS);

section;
# create output data file split2.tmp to illustrate data generation
# (only first 1000 records)
keep = ID,SNN,SN,ORG,DES,TS,TF,MARR,MD1,SD1,MD2,SD2,MD3,SD3,NCHILD,BD1;
pdata(1,1000) = split2.tmp;

section;
# print data to output file split2.dat
# (only selected variables for subsequent use)

keep = ID,SNN,SN,ORG,DES,TS,TF,MARR,NCHILD,BD;
pdata = split2.dat;
```

Box 4.3.6 First records of `split2.dat`

ID	SNN	SN	ORG	DES	TS	TF	MARR	NCHILD	BD
102	5	1	0	9	754	822	0	0	610
102	5	2	9	1	822	824	0	0	610
102	5	3	1	1	824	949	0	0	610
102	5	3	1	1	949	977	1	0	610
102	5	3	1	7	977	980	1	1	610
102	5	4	7	7	980	1004	1	1	610
102	5	4	7	7	1004	1037	1	2	610
102	5	4	7	1	1037	1046	1	3	610
102	5	5	1	1	1046	1104	1	3	610
202	4	1	0	9	801	894	0	0	657
202	4	2	9	1	894	895	1	0	657
202	4	3	1	1	895	907	1	0	657
202	4	3	1	7	907	951	1	1	657
202	4	4	7	7	951	964	1	1	657
202	4	4	7	7	964	1104	1	2	657
302	4	1	0	9	791	894	0	0	647
302	4	2	9	1	894	896	0	0	647
302	4	3	1	1	896	928	0	0	647
302	4	3	1	1	928	940	1	0	647
302	4	3	1	1	940	962	1	1	647
302	4	3	1	7	962	963	1	2	647
302	4	4	7	7	963	1104	1	2	647

4.4 Redefining the Time Axis

File `split2.dat` now consists of multi-episode data with information about the origin and destination state of each episode, starting and ending dates, coded in century months, as well as a set of covariates, such as respondent's birth date, marital status, and number of children. However, before data can be used in empirical analysis, we have to redefine the time axis. TDA always assumes a process time axis that begins at time zero. The definition of starting and ending times with the ts and tf commands must conform to this assumption.

To define a time axis, one has at least two options. One can use a common process time axis where the first episode for each individual begins at time zero, or one can reset the clock at the beginning of each new episode. The decision depends on substantive issues and the research question. In our example, we use the latter option and start the process at the beginning of each new episode. The easiest way is to define the time of entry into the episode as zero and the ending time as the episode's duration. However, since the episodes have been split to allow for the updating of time-dependent covariates, the splits must be taken into account in order to define the process time axis. Command file `ehd2.cf` is shown in Box 4.4.1. Output file is `ehd2.dat`.

Box 4.4.1 Command file `ehd2.cf` to create data file `ehd2.dat`

```
# ehd2.cf
# command file to create event history data defined on a
# process time axis

dfile = split2.dat;      input data file
noc = 30000;             max number of cases
dblock (100) = ID;       block mode

ID      [6.0] = c1;
SNN     [2.0] = c2;
SN      [2.0] = c3;
ORG     [2.0] = c4;
DES     [2.0] = c5;
TS      [4.0] = c6;
TF      [4.0] = c7;
MARR    [2.0] = c8;
NCHILD  [2.0] = c9;
BD      [4.0] = c10;

# ORG1 = origin state of preceding record
ORG1 [2.0] = lag(ORG,-1);

# IND = indicator variable, taking value 1 if in the first record
# of a block or if current record begins with a new origin state,
# that is, if IND = 1 then we are at the beginning of a new spell.
IND [1.0] = bfirst + ne(ORG,ORG1);

# TS0 = starting time of new spells
TS0 [4.0] = if IND then TS else pre(TS0);

# TS1 and TF1 are starting and ending time on a process time axis
# that begins with new spells
TS1 [4.0] = TS - TS0;
TF1 [4.0] = TF - TS0;

pdata = ehd2.dat;
```

Box 4.4.2. shows first records in the data set `ehd2.dat`, where one can see how the process time axis was derived from the calendar time axis.

We can now check the transitions with TDA. The command file is `ehd3.cf` shown in Box 4.4.3. Part of TDA's standard output is shown in Box 4.4.4. The table in this output shows which types of episodes (transitions) are found in the input data. Transitions between origin and destination states are shown separately for each origin state. In our data set, we have, for example, 1417 episodes that start with schooling at respondent's age 12 and are right censored at the time of interview. This means that these persons have not started employment and are still in school. 651 episodes ended in full-time employment. These persons either got employed without finishing their education, or the end of education and start of a full-time job occurred simultaneously, i.e. in the same month.

Box 4.4.2 First records of `ehd2.dat`

```
ID SNN SN ORG DES  TS   TF MARR NCHILD BD ORG1 IND TSO TS1 TF1
-------------------------------------------------------------
102  5  1  0  9  754  822   0     0  610  0    1  754   0  68
102  5  2  9  1  822  824   0     0  610  0    1  822   0   2
102  5  3  1  1  824  949   0     0  610  9    1  824   0 125
102  5  3  1  1  949  977   1     0  610  1    0  824 125 153
102  5  3  1  7  977  980   1     1  610  1    0  824 153 156
102  5  4  7  7  980 1004   1     1  610  1    1  980   0  24
102  5  4  7  7 1004 1037   1     2  610  7    0  980  24  57
102  5  4  7  1 1037 1046   1     3  610  7    0  980  57  66
102  5  5  1  1 1046 1104   1     3  610  7    1 1046   0  58
202  4  1  0  9  801  894   0     0  657  0    1  801   0  93
202  4  2  9  1  894  895   1     0  657  0    1  894   0   1
202  4  3  1  1  895  907   1     0  657  9    1  895   0  12
202  4  3  1  7  907  951   1     1  657  1    0  895  12  56
202  4  4  7  7  951  964   1     1  657  1    1  951   0  13
202  4  4  7  7  964 1104   1     2  657  7    0  951  13 153
```

Box 4.4.3 Command file `ehd3.cf` to check episode data with TDA

```
# ehd3.cf
# using ehd2.dat to define episode data for TDA

dfile = ehd2.dat;        input data file
noc = 30000;             max number of cases
dblock(100) = ID;        block mode

ID     [6.0] = c1;
SNN    [2.0] = c2;
SN     [2.0] = c3;
ORG    [2.0] = c4;
DES    [2.0] = c5;
TS     [4.0] = c6;
TF     [4.0] = c7;
MARR   [2.0] = c8;
NCHILD [2.0] = c9;
BD     [4.0] = c10;
ORG1   [2.0] = c11;
IND    [1.0] = c12;
TSO    [4.0] = c13;
TS1    [4.0] = c14;
TF1    [4.0] = c15;
TF2    [4.0] = if eq(TF1,TS1) then TF1 + 0.5 else TF1;

# define a variable SEL to select all persons starting their event
# histories with origin state 0.

ORGF = eq(ORG,0) . eq(brec,1);
SEL  = cnteq(ORGF,1);
vsel = SEL;

# defining episode data on process time axis
org = ORG;
des = DES;
ts  = TS1;
tf  = TF2;
```

Box 4.4.4 Part of TDA's standard output when using **ehd3.cf**

```
Read records: 26576
Selected for data matrix: 26457 records.
Number of blocks: 4194
Block size (records): 1 minimum, 18 maximum.

Single episode data. Max number of transitions: 100.
Origin state: ORG
Destination state: DES
Starting time: TS1
Ending time: TF2
```

SN	Org	Des	Episodes	Weighted	Mean Duration	TS Min	TF Max
1	0	0	1417	1417.00	69.25	0.00	461.00
1	0	1	651	651.00	75.80	0.00	187.00
1	0	2	51	51.00	55.39	0.00	126.00
1	0	3	88	88.00	49.69	0.00	136.00
1	0	7	6	6.00	44.17	0.00	119.00
1	0	9	2894	2894.00	68.76	0.00	259.00
1	1	1	9528	9528.00	43.82	0.00	468.00
1	1	2	30	30.00	43.43	0.00	373.00
1	1	3	96	96.00	40.90	0.00	410.00
1	1	4	177	177.00	63.16	0.00	384.00
1	1	5	31	31.00	17.94	0.00	168.00
1	1	6	143	143.00	99.23	0.00	452.00
1	1	7	1953	1953.00	17.78	0.00	362.00
1	2	1	72	72.00	31.75	0.00	267.00
1	2	2	180	180.00	38.42	0.00	318.00
1	2	3	4	4.00	35.25	0.00	91.00
1	2	4	4	4.00	23.25	0.00	34.00
1	2	6	1	1.00	62.00	0.00	62.00
1	2	7	47	47.00	19.10	0.00	140.00
1	3	1	106	106.00	50.38	0.00	361.00
1	3	2	6	6.00	34.50	0.00	118.00
1	3	3	1369	1369.00	51.46	0.00	431.00
1	3	4	2	2.00	14.50	0.00	70.00
1	3	5	2	2.00	46.00	0.00	51.00
1	3	6	6	6.00	95.83	0.00	237.00
1	3	7	54	54.00	36.28	0.00	299.00
1	4	1	13	13.00	8.73	0.00	18.00
1	4	3	1	1.00	8.00	0.00	8.00
1	4	4	209	209.00	10.87	0.00	114.00
1	5	1	21	21.00	33.19	0.00	98.00
1	5	2	1	1.00	62.00	0.00	62.00
1	5	3	1	1.00	56.00	0.00	56.00
1	5	5	34	34.00	26.35	0.00	208.00

Box 4.4.4 (continued)

SN	Org	Des	Episodes	Weighted	Mean Duration	TS Min	TF Max
1	6	1	6	6.00	38.83	0.00	102.00
1	6	2	7	7.00	23.43	0.00	89.00
1	6	3	3	3.00	5.00	0.00	12.00
1	6	6	172	172.00	43.74	0.00	264.00
1	7	1	1206	1206.00	32.12	0.00	304.00
1	7	2	47	47.00	37.40	0.00	184.00
1	7	3	79	79.00	24.22	0.00	266.00
1	7	4	17	17.00	39.00	0.00	146.00
1	7	6	6	6.00	67.50	0.00	167.00
1	7	7	2065	2065.00	31.11	0.00	332.00
1	9	1	2560	2560.00	13.42	0.00	328.00
1	9	2	58	58.00	17.62	0.00	259.00
1	9	3	268	268.00	17.10	0.00	279.00
1	9	7	8	8.00	22.00	0.00	91.00
1	9	9	757	757.00	24.68	0.00	321.00

4.5 Estimating Survivor Functions

We will finally provide some examples of data analysis using the event-history PFFS data file, created in the previous steps. First, we will give an example of a nonparametric estimation method that can be used to describe the characteristics of the process under study. Because nonparametric methods do not make any assumptions about the distribution of the process, they are particularly suited for first exploratory data analyses. TDA contains procedures to calculate life tables and Kaplan-Meier (or product limit) estimates. In the following example, a product-limit method will be used to estimate a survivor function for the duration of episodes that start at the completion of education (origin state = 9). For this example, all destination states are merged into a single destination state.

Command file is `ehd4.cf` shown in Box 4.5.1. Part of the resulting table, `ple.1`, is shown in Box 4.5.2.

In the output, the column labeled `Time` shows the points in time where at least one event takes place. The number of events (transitions) is given in the next column. Therefore, when education is completed, 424 „post-education state" spells terminate within one month, mostly due to starting a full-time or part-time job, or other forms of work. Within two months, another 303 spells are terminated, altogether over 25 % of all episodes with the origin state 9.

To more easily evaluate the shape of the survivor function, it has been plotted against the duration of spells. To plot the survivor function we use command file `plot1.cf` shown in Box 4.5.3.

Note that the output file `ple.1`, that was created in the preceding step, is now used as the input file for plotting the survivor function. In the command file `plot1.cf`, the `postscript` command defines the name of the output file containing the PostScript description of the plot, in our case `plot1.ps`. This is a file that can be sent to a PostScript printer for a hard copy of the plot.[1] The resulting plot is shown in Figure 4.5.1.

The plot of the survivor function shows estimates of the proportion of respondents who have not yet become employed (full-time, part-time, other forms of work) after completing their education up to a specific duration. For example, after three and a half months, half of the respondents are still without employment, whereas the other half have already left this state. For the majority of individuals, the period between finishing school and starting a job is very short. However, for a small proportion of people, this is a long-term condition.

[1] However, because developing reasonable plots normally requires several trials, it is very helpful to have a program that gives a previews on the screen of a terminal. An excellent program for this is GhostScript, distributed by the Free Software Foundation.

Box 4.5.1 Command file `ehd4.cf` to estimate a survivor function

```
# ehd4.cf
# using ehd2.dat to define episode data for TDA
# and to estimate a survivor function for duration in state 9

section = "read ehd2.dat";

dfile = ehd2.dat;        input data file
noc = 30000;             max number of cases
dblock(100) = ID;        block mode

ID      [6.0] = c1;
SNN     [2.0] = c2;
SN      [2.0] = c3;
ORG     [2.0] = c4;
DES     [2.0] = c5;
TS      [4.0] = c6;
TF      [4.0] = c7;
MARR    [2.0] = c8;
NCHILD [2.0] = c9;
BD      [4.0] = c10;
ORG1    [2.0] = c11;
IND     [1.0] = c12;
TS0     [4.0] = c13;
TS1     [4.0] = c14;
TF1     [4.0] = c15;
TF2     [4.0] = if eq(TF1,TS1) then TF1 + 0.5 else TF1;

# define a variable SEL to select all persons starting their event
# histories with origin state 0.

ORGF = eq(ORG,0) . eq(brec,1);
SEL  = cnteq(ORGF,1);
vsel = SEL;

section = "define new state space";

# single origin state: 9, all possible destination states are put
# together in a new destination state 10.

NEWDES [2.0] = if ne(DES,9) then 10 else 9;

# select only episodes beginning in state 9
tsel = ORG[9];

# defining episode data on process time axis
org = ORG;
des = NEWDES;
ts  = TS1;
tf  = TF2;

# request product-limit estimation and
# write results to ple.1
ple = ple.1;
```

Box 4.5.2 Part of `ple.1`

```
SN 1. Transition: 9,10 - Product-Limit Estimation

                        Number  Number    Exposed  Survivor   Std.     Cum.
ID Index       Time     Events  Censored  to Risk  Function  Error     Rate
 0     0       0.00          0         0     2894   1.00000 0.00000 0.00000
 0     1       1.00        424         0     2894   0.85349 0.00657 0.15842
 0     2       2.00        303        28     2470   0.74879 0.00806 0.28930
 0     3       3.00        594        10     2167   0.54354 0.00926 0.60966
 0     4       4.00        259        20     1573   0.45404 0.00926 0.78956
 0     5       5.00         78         8     1314   0.42709 0.00920 0.85076
 .........

 0   174     265.00          2         0       11   0.00311 0.00104 5.77317
 0   175     274.00          1         0        9   0.00276 0.00098 5.89095
 0   176     279.00          1         0        8   0.00242 0.00091 6.02448
 0   177     280.00          1         0        7   0.00207 0.00085 6.17864
 0   178     281.00          1         0        6   0.00173 0.00077 6.36096
 0   179     291.00          1         0        5   0.00138 0.00069 6.58410
 0   180     299.00          1         0        4   0.00104 0.00060 6.87178
 0   181     303.00          1         0        3   0.00069 0.00049 7.27725
 0   182     312.00          1         0        2   0.00035 0.00035 7.97039
Median Duration: 3.49
Duration times limited to: 312
Cases: 3650  weighted: 3650
```

Box 4.5.3 Command file `plot1.cf` to plot survivor function

```
dfile = ple.1;   data file with PL estimates

T  = c3;                 time axis
S  = c7;                 survivor function

postscript = plot1.ps;  PostScript output file
pxlen = 100;            size of plot
pylen = 55;
pxa(12,0) = 0,120;      logical X axis
pya(0.5,5) = 0,1;       logical Y axis
pyfmt = 3.1;            print format for y axis labels
plot = T,S;             plot T vs. S
```

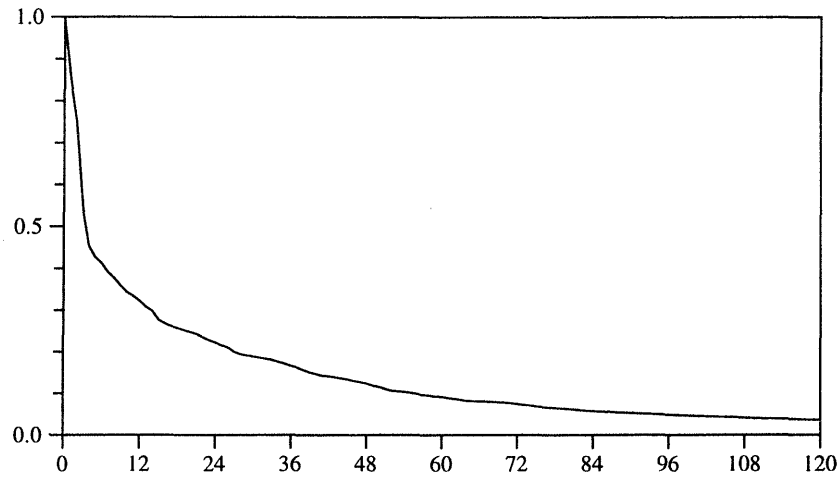

Figure 4.5.1 Survivor function for episodes beginning in state 9.

4.6 Estimating Piecewise Constant Exponential Models

Finally, we will provide an example of estimating a transition rate model with time-varying covariates. In this application, we will use the piecewise constant exponential model. This is a generalization of the standard exponential model and particularly useful in many practical research situations.[2] It is particularly helpful when researchers are not in a position to measure and include important time-dependent covariates explicitly or when they do not have a clear idea about the form of the time-dependence of the process. In both of these situations, a small modification of the exponential model leads to a very flexible instrument of analysis.

The basic idea is to split the time axis into duration periods and to assume that transition rates are constant in each of these intervals but can change between them. In our example, we use ten time periods, each having a length of 12 months, plus an additional open-ended interval. To define these time periods, the command is `tp = 0(12)120`. In addition, we include two covariates in the model – `MARR` and `NCHILD` – to investigate whether marital status and the number of children have an effect on the likelihood to start work (and in a very few cases on a move to an inactivity episode). Command file is `ehmod1.cf`, shown in Box 4.6.1. Box 4.6.2 shows the estimation results.

Based on the coefficients presented in Box 4.6.2, one can draw the following conclusions: First, the rate of leaving the post-educational episode is very high in the first 12 months after finishing school. For those who have not started working within

[2] Let us point out again that the presentation and application of a number of other parametric and semi-parametric models is discussed in detail in Blossfeld and Rohwer (1995).

Box 4.6.1 Command file **ehmod1.cf** to estimate piecewise constant exponential model

```
# ehmod1.cf
# using ehd2.dat to define episode data for TDA
# and to estimate a piecewise constant exponential model
# for duration in state 9

section = "read ehd2.dat";
dfile = ehd2.dat;        input data file
noc = 30000;             max number of cases
dblock(100) = ID;        block mode

ID      [6.0] = c1;
SNN     [2.0] = c2;
SN      [2.0] = c3;
ORG     [2.0] = c4;
DES     [2.0] = c5;
TS      [4.0] = c6;
TF      [4.0] = c7;
MARR    [2.0] = c8;
NCHILD  [2.0] = c9;
BD      [4.0] = c10;
ORG1    [2.0] = c11;
IND     [1.0] = c12;
TS0     [4.0] = c13;
TS1     [4.0] = c14;
TF1     [4.0] = c15;
TF2     [4.0] = if eq(TF1,TS1) then TF1 + 0.5 else TF1;

# define a variable SEL to select all persons starting their event
# histories with origin state 0.

ORGF = eq(ORG,0) . eq(brec,1);
SEL  = cnteq(ORGF,1);
vsel = SEL;

section = "define new state space";
# single origin state: 9, all possible destination states are put
# together in a new destination state 10.
NEWDES [2.0] = if ne(DES,9) then 10 else 9;
# select only episodes beginning in state 9
tsel = ORG[9];
# defining episode data on process time axis
org = ORG;
des = NEWDES;
ts  = TS1;
tf  = TF2;

# define piecewise constant exponential model
tp = 0 (12) 120;                time periods
rate = 3;                       model selection
xa(9,10) = MARR, NCHILD;        covariates
```

a year, the transition rate out of this status decreases substantially and remains – with some fluctuations – low in the next years. The coefficient for marriage is

Box 4.6.2 Estimation results of piecewise constant exponential model

Idx	SN	Org	Des	MT	Variable	Coeff	Error	T-Stat	Signif
1	1	9	10	A	Period-1	-2.2197	0.0231	-95.9952	1.0000
2	1	9	10	A	Period-2	-3.3690	0.0577	-58.4208	1.0000
3	1	9	10	A	Period-3	-3.6525	0.0790	-46.2443	1.0000
4	1	9	10	A	Period-4	-3.5638	0.0891	-39.9977	1.0000
5	1	9	10	A	Period-5	-3.4541	0.1021	-33.8167	1.0000
6	1	9	10	A	Period-6	-3.9029	0.1487	-26.2512	1.0000
7	1	9	10	A	Period-7	-3.4976	0.1419	-24.6488	1.0000
8	1	9	10	A	Period-8	-3.9147	0.2013	-19.4469	1.0000
9	1	9	10	A	Period-9	-3.8978	0.2251	-17.3193	1.0000
10	1	9	10	A	Period-10	-3.9332	0.2585	-15.2124	1.0000
11	1	9	10	A	Period-11	-3.2811	0.1434	-22.8774	1.0000
12	1	9	10	A	MARR	-0.0880	0.0730	-1.2043	0.7715
13	1	9	10	A	NCHILD	-0.2911	0.0549	-5.2979	1.0000

Log likelihood (starting values): -11610.2716
Log likelihood (final estimates): -10756.1097

negative but not statistically significant. Being married or not has no significant effect on the transition rate.

Children, however, have a significant negative effect on the rate of starting a job after finishing school. Each child decreases the likelihood to start a job by about 25 percent, since $\exp(-0.2911) = 0.747$. Of course, to study the entrance into first employment, for example, one would have to reorganize the data somewhat, to consider only „valid" destination states, and include individuals who move directly from education to employment. However, our purpose here is different. The example and interpretations given here only serve for didactical purposes.

References

Blossfeld, H.-P., Rohwer, G. (1995). Techniques of Event History Modeling. New Approaches to Causal Analysis. Mahwah, NJ: Lawrence Erlbaum.

Blossfeld, H.-P., Drobnič, S., Rohwer, G. (1996). Employment Patterns: A Crossroad Between Class and Gender. A Long-term Longitudinal Study of Spouses' Careers in West Germany. University of Bremen, Sfb 186 Working Paper Nr. 33.

Drobnič, S., Fratczak, E., Kowalska, I. (1996). Employment Patterns of Polish Couples. University of Bremen and the Warsaw School of Economics. Mimeo.

Holzer, J. Z., Kowalska, I. (1995). FFS Standard Country Report: Poland. Warsaw. Mimeo.

Population Activities Unit (1992). Questionnaire and Codebook for the Fertility and Family Surveys in Countries of the ECE Region. Published by the Population Activities Unit of the Economic Commission for Europe. New York: United Nations.

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Appendix A

Variable Descriptions

This appendix provides a complete list of variables available in the PFFS data archive. The description of variables is organized according to the data files in the archive:

A.1	`anka1.d`	household structure
A.2	`anka2.d`	household members
A.3	`ankb1.d`	basic information about respondents
A.4	`ankb2.ds`	educational careers
A.5	`ankb31.ds`	employment careers
A.6	`ankb32.ds`	inactivity spells
A.7	`ankb4.ds`	regional mobility
A.8	`ankb5.ds`	residential mobility
A.9	`ankb6.ds`	fertility and children
A.10	`ankb7.ds`	partnerships

The description of variables given below corresponds to the variable description file in the PFFS data archive. Each entry begins with the variable's name. Then follow: the logical file number, the column number where the variable's data begin and the field width, and finally a variable label. In addition, for most variables, there is a description of value labels.

A.1 Household Structure (`anka1.d`)

The variables described in the present section belong to data file **`anka1.d`**.

```
HHID        1   0   4   household (hh) ID number
NRA         1   5   4   number of questionnaire
SGO         1  10   9   household identification number
TER         1  20   6   territorial symbol
KLM         1  27   1   category of place of residence
    0 - urban -  200,000+ inhabitants
    1 - urban -  100,000- 199,999 inhabitants
    2 - urban -   50,000-  99,999 inhabitants
    3 - urban -   20,000-  49,999 inhabitants
    4 - urban -   10,000-  19,999 inhabitants
    5 - urban -    5,000-   9,999 inhabitants
    6 - urban -  < 5,000 inhabitants
    9 - rural
D1P01       1  29  2   total number of persons in hh
    lower limit: 1,  upper limit: 15
D1P02       1  32  2   total number of persons who arrived to hh
    lower limit: 0,  upper limit: 13
D1P03       1  35  2   number of persons who arrived to hh by birth
    lower limit: 0,  upper limit: 10
D1P04       1  38  2   number of persons who arrived to hh by marriage
```

```
    lower limit: 0,  upper limit: 4
D1P05      1  41  2   number of persons who arrived to hh by other reasons
    lower limit: 0,  upper limit: 3
D1P06      1  44  2   number of working persons
    lower limit: 0,  upper limit: 7
D1P07      1  47  2   number of persons having no paid income
    lower limit: 0,  upper limit: 7
D1P08      1  50  2   number of persons who are maintained
    lower limit: 0,  upper limit: 11
D1P09      1  53  2   type of living arrangement
     1   - mistake
    10 - one-person household
    11 - married couple without children
    12 - married couple without children with parents / parents-in-law
    13 - married couple without children with parents / parents-in-law
         and/or brothers and sisters
    14 - married couple without children with relative
    15 - married couple without children with non-relative
    21 - married couple with children
    22 - married couple with children and parents/parents-in-law
    23 - married couple with children and parents/parents-in-law
         and brothers and sisters
    24 - married couple with children and other relatives
    25 - married couple with children and non-relatives
    31 - single mother/father with children
    32 - single mother/father with children and parents/parents-in-law
    33 - single mother/father with children and parents/parents-in-law
         and/or brothers and sisters
    34 - single mother/father with children and other relatives
    35 - single mother/father with children and non-relatives
    40 - other possibilities (brothers and sisters, non-relatives)
D1P010     1  56  2   number of families in the household
     0 - one-person, non-family and special household
     1 - household with 1 family
     2 - household with 2 families
     3 - household with 3 and more families
D1P011     1  59  2   number of persons who need special care
    lower limit: 0,  upper limit: 3
D1P012     1  62  2   main source of hh maintenance
     FOR EMPLOYEES
     1 - employment in non-agricultural public sector (state and communal)
     2 - self-employment in non-agricultural sector
     3 - employment in non-agricultural private sector
         (co-operative, social organizations, foreign and church)
     4 - employment in agricultural co-operatives
     5 - employment in agricultural units of the socialized sector
     6 - self-employment in agriculture (individual farm, allotted garden)
     7 - employment in agricultural units in the private sector
     FOR PERSONS HAVING SOURCE OF MAINTENANCE OTHER THAN EMPLOYMENT
     8 - retirement pension, disability pension, family pension
     9 - other source of maintenance (child-raising allowance,
         rehabilitation allowance, unemployment benefits, social
         assistance benefits, alimony, income from property, savings)
    FOR DEPENDENT PERSONS
    11 - by person employed in a non-agricultural public sector
         (state or municipal)
```

```
    12 - by person self-employed in a non-agricultural sector
    13 - by person employed in a non-agricultural private sector
         co-operatives, socialized, foreign and church)
    14 - by person employed in an agricultural co-operative units
    15 - by person employed in agricultural units of the socialized sector
    16 - by individual farmer
    17 - by salaried worker employed in an agricultural private sector
    18 - by retirement, disabled or family pensioner
    19 - by person having a source of maintenance other than
         retirement, disability and family pension
D1P013H    1  65  2   total area of agricultural farm in ha
    lower limit: 0,  upper limit: 40
D1P013A    1  68  2   total area of agricultural farm in a
    lower limit: 0,  upper limit: 99
D1P014H    1  71  2   total area of arable land of farm in ha
    lower limit: 0,  upper limit: 35
D1P014A    1  74  2   total area of arable land of farm in ha
    lower limit: 0,  upper limit: 98
D1P015     1  77  2   ownership of dwelling unit (owned, rented, other)
    1 - owned
    2 - rented
    3 - together with others
    4 - others
    5  - lack of data
D1P016     1  80  2   rank number of person who is owner of dwelling unit
    lower limit: 0,  upper limit: 12
D1P017     1  83  2   socioeconomic group of hh
    1 - employees' households - maintained from work in
        socialized and non-socialized economy
    2 - farming households - maintained from work in private
        agricultural farms
    3 - worker - farmer households, maintained from work
        in socialized and non-socialized economy as well as from
        work in private agricultural farms
    4 - households of retirees and pensioners - maintained from old
        age and disability pensions
    5 - households of persons working on own account
    6 - no paid income, other than rent or pension
D3P01      1  86    2   number of persons aged 18-49 in hh
    lower limit: 0,  upper limit: 9
D3P02      1  89  12   rank number of persons aged 18-49 (anka2, col 01)
D3P02_1    1  89   2   rank number of 1. person aged 18-49
D3P02_2    1  91   2   rank number of 2. person aged 18-49
D3P02_3    1  93   2   rank number of 3. person aged 18-49
D3P02_4    1  95   2   rank number of 4. person aged 18-49
D3P02_5    1  97   2   rank number of 5. person aged 18-49
D3P02_6    1  99   2   rank number of 6. person aged 18-49
D3P03      1 102  24   reasons of non-response
D3P03_1    1 102   4   reasons of non-response, 1. person
    0 - does not  apply
    1 - refusal of answer
    2 - no data available due to respondents
    3 - no data available, unknown reasons
D3P03_2    1 106   4   reasons of non-response, 1. person
D3P03_3    1 110   4   reasons of non-response, 1. person
D3P03_4    1 114   4   reasons of non-response, 1. person
```

```
D3P03_5    1 118   4   reasons of non-response, 1. person
D3P03_6    1 122   4   reasons of non-response, 1. person
```

A.2 Household Members (anka2.d)

The variables described in the present section belong to data file **anka2.d**.

```
A2PID    2   0   6   person ID number
A2HHID   2   7   4   household  ID number
A2NRA    2  12   4   number of questionnaire
A2SGO    2  17   9   household identification number
A2TER    2  27   6   territorial symbol
A2KLM    2  34   1   category of place of residence
    0 - urban -  200,000+ inhabitants
    1 - urban -  100,000- 199,999 inhabitants
    2 - urban -   50,000-  99,999 inhabitants
    3 - urban -   20,000-  49,999 inhabitants
    4 - urban -   10,000-  19,999 inhabitants
    5 - urban -    5,000-   9,999 inhabitants
    6 - urban -  < 5,000 inhabitants
    9 - rural
A2NRO    2  36  2   rank number of person
    lower limit: 1,  upper limit: 15
KO2      2  39  2   type of relationship to household head
    0 -   mistake
    1 -   mistake
   10 - head of household
   11 - husband, wife (first marriage)
   12 - husband, wife (second marriage)
   13 - partner
   21 - son, daughter
   22 - step-son, step-daughter (child of previous marriage of spouse or partner)
   23 - adopted child
   24 - foster child
   25 - son-in-law, daughter-in-law
   26 - grandson, granddaughter
   31 - father, mother
   32 - step-father, step-mother
   33 - father-in-law, mother-in-law
   34 - father's, mother's partner (step-father's, step-mother's partner)
   41 - grandfather, grandmother
   51 - brother, sister
   52 - uncle, aunt
   61 - other relatives
   71 - unrelated person
KO3      2  42  2   number of families in household
    0 - one-person hh, non-family or special hh
    1 - one family
    2 - two families
    3 - three families
    4 - four families
KO4      2  45  2   column 04, type of relationship to family head
    0 - person in one-person, non-family or special household
    1 - head of family
    2 - husband, wife
```

```
    3 - son, daughter
    4 - linear descendent of older generation
    5 - other unrelated person
K05      2  48  2   column 05, sex
    1 - male
    2 - female
K06M     2  51  2   column 06, birth date, month
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    lower limit: 1,  upper limit: 12
K06R     2  54  2   column 06, birth date, year
   -1 - no data available due to interviewers
    0 - person born up to 1900
    lower limit: 1,  upper limit: 91
K07      2  57  2   column 07, martial status
    0 - mistake
    1 - single
    2 - married (formal)
    3 - married (informal)
    4 - widower, widow
    5 - separated
    6 - divorced
K08      2  60  2   column 08, main activity
    1 - employee
    2 - person running household
    3 - pupil, student
    4 - pensioner
    5 - other
K09      2  63  2   column 09, main maintenance source
   FOR EMPLOYEES
    1 - employment in non-agricultural public sector (state and communal)
    2 - self-employment in non-agricultural sector
    3 - employment in non-agricultural private sector
        (co-operative, social organizations, foreign and church)
    4 - employment in agricultural co-operatives
    5 - employment in agricultural units of the socialized sector
    6 - self-employment in agriculture (individual farm, allotted garden)
    7 - employment in agricultural units in the private sector
   FOR PERSONS HAVING SOURCE OF MAINTENANCE OTHER THAN EMPLOYMENT
    8 - retirement pension, disability pension, family pension
    9 - other source of maintenance (child-raising allowance,
        rehabilitation allowance, unemployment benefits, social
        assistance benefits, alimony, income from property, savings)
   FOR DEPENDENT PERSONS
   11 - by person employed in a non-agricultural public sector
        (state or municipal)
   12 - by person self-employed in a non-agricultural sector
   13 - by person employed in a non-agricultural private sector
        co-operatives, socialized, foreign and church)
   14 - by person employed in an agricultural co-operative unit
   15 - by person employed in agricultural units of the socialized
        sector
   16 - by individual farmer
   17 - by salaried worker employed in an agricultural private sector
   18 - by retirement, disability or family pension
   19 - by person having the source of maintenance other than
```

```
        retirement, disabled and family pension
K010M    2  66  2   column 10, month of arrival at household
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    lower limit: 1,  upper limit: 12
K010R    2  69  2   column 10, year of arrival at household
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    lower limit: 14,  upper limit: 91
K011     2  72  2   column 11, type of arrival to household
    1 - creation of household
    2 - birth
    3 - contraction of a formal marriage
    4 - entering informal marriage
    5 - other situations
```

A.3 Basic Information about Respondents (ankb1.d)

The variables described in the present section belong to data file **ankb1.d**.

```
B1PID   3   0   6   person ID number
B1HHID  3   7   4   household  ID number
B1NRA   3  12   4   number of questionnaire
B1SGO   3  17   9   household identification number
B1TER   3  27   6   territorial symbol
B1KLM   3  34   1   category of place of residence
    0 - urban -  200,000+ inhabitants
    1 - urban -  100,000- 199,999 inhabitants
    2 - urban -   50,000-  99,999 inhabitants
    3 - urban -   20,000-  49,999 inhabitants
    4 - urban -   10,000-  19,999 inhabitants
    5 - urban -    5,000-   9,999 inhabitants
    6 - urban -  < 5,000 inhabitants
    9 - rural
B1NRO   3       36      2       rank number of person
    lower limit:  1,   upper limit:  12
D1PO1R  3       39      2       sex of respondent
    1 - male
    2 - female
D1PO1W  3       42      2       sex of respondent's partner
    1 - male
    2 - female
D1PO2R  3       45      4       date of respondent's birth
D1PO2RM 3       45      2       month of respondent's birth
    lower limit:  1,   upper limit:  12
D1PO2RR 3       47      2       year of respondent's birth
    lower limit:  22,   upper limit:  74
D1PO2WM 3       50      2       month of birth of respondent's partner
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    lower limit: 1, upper limit:  12
D1PO2WR 3       52      2       month of birth of respondent's partner
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    0 - does not apply, no partner
```

```
    lower limit:  21,   upper limit:  73
D1PO3R  3       58      2       category of municipality of  respondent's birth
    1 - urban - 100,000+ inhabitants
    2 - urban - 20,000 - 99,999 inhabitants
    3 - urban - < 20,000 inhabitants
    4 - rural
D1PO3W  3       61      2       category of municipality of birth of respondent's partner
   -1 - no data available due to respondents
    0 - does not apply, no partner
    1 - urban - 100,000+ inhabitants
    2 - urban - 20,000 - 99,999 inhabitants
    3 - urban - < 20,000 inhabitants
    4 - rural
D1PO4R  3       64      2       highest level of respondent's completed education
    1 - primary
    2 - basic vocational
    3 - secondary general
    4 - secondary professional
    5 - post-secondary
    6 - higher
    7 - post-graduate
    8 - primary uncompleted
D1PO4W  3       67      2   highest level of completed education of partner
   -1 - no data available due to respondents
    0 - does not apply, no partner
    2 - basic vocational
    3 - secondary general
    4 - secondary professional
    5 - post-secondary
    6 - higher
    7 - post-graduate
    8 - primary uncompleted
D1PO5R  3       70      2       occupational activity of respondent
   -1 - no data available due to respondents
    1 - working
    2 - worked, but is not working
    3 - never worked
D1PO5W  3       73      2       occupational activity of respondent's partner
   -1 - no data available due to respondents
    0 - does not apply, no partner
    1 - working
    2 - worked, but is not working
    3 - never worked
D1PO6R  3       76      2       national economy division in the main job of respondent
   -1 - no data available due to respondents
    0 - does not apply, is not working
    1 - state
    2 - communal
    3 - cooperative
    4 - social
    5 - foreign
    6 - private
    7 - church
D1PO6W  3       79      2       national economy division in the main job of partner
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
```

```
    0 - does not apply, is not working or no partner
    1 - state
    2 - communal
    3 - cooperative
    4 - social
    5 - foreign
    6 - private
    7 - church
D1PO7R  3       82      2       socio-occupational group in the main job of respondent
   -1 - no data available due to interviewers
    0 - does not apply, is not working
    1 - employees in public and economic administration
    2 - employees - experts in engineering professions
    3 - employees - experts in non-engineering professions
    4 - employees - in professions connected with transport,
        trade and communication, and services
    5 - factory workers and similar professions
    6 - workers in construction and related professions
    7 - workers and unskilled workers
    8 - self-employed outside agriculture
    9 - employed as experts in agriculture and forestry
   10 - agricultural and forest workers
   11 - individual farmers
   12 - others
D1PO7W  3       85      2       socio-occupational group in the main job of partner
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply, is not working or no partner
    1 - employees in public and economic administration
    2 - employees - experts in engineering professions
    3 - employees - experts in non-engineering professions
    4 - employees - in professions connected with transport,
        trade and communication, and services
    5 - factory workers and similar professions
    6 - workers in construction and related professions
    7 - workers and unskilled workers
    8 - self-employed outside agriculture
    9 - employed as experts in agriculture and forestry
   10 - agricultural and forest workers
   11 - individual farmers
   12 - others
D1PO8R  3       88      2       prestige of the main job of respondent
   -1 - no data available due to interviewers
    0 - does not apply, is not working
    1 - supervising a group of persons who have subordinates
    2 - supervising a group of persons who have no subordinates
    3 - executive standing
D1PO8W  3       91      2       prestige of the main job of respondent's partner
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply, is not working or no  partner
    1 - supervising a group of persons who have subordinates
    2 - supervising a group of persons who have no subordinates
    3 - executive standing
D1PO9R  3       94      2       national economy division in an additional job
   -1 - no data available due to interviewers
```

```
    0 - does not apply, is not working
    1 - state
    2 - communal
    3 - cooperative
    4 - social
    5 - foreign
    6 - private
D1PO9W  3       97      2       national economy division in an additional job of partner
   -1 - no data available due to interviewers
    0 - does not apply, is not working or no partner
    1 - state
    2 - communal
    3 - cooperative
    4 - social
    5 - foreign
    6 - private
    7 - church
D1PO10R 3       100     2       socio-occupational group in additional job
   -1 - no data available due to interviewers
    0 - does not apply, is not working
    1 - employees in public and economic administration
    2 - employees - experts in engineering professions
    3 - employees - experts in non-engineering professions
    4 - employees - in professions connected transport, trade
        and communication, and services
    5 - factory workers and similar professions
    6 - workers in construction and related professions
    7 - workers and unskilled workers
    8 - self-employed outside agriculture
    9 - employed as experts in agriculture and forestry
   10 - agricultural and forest workers
   11 - individual farmers
   12 - others
D1PO10W 3       103     2       socio-occupational group in partner's additional job
   -1 - no data available due to interviewers
    0 - does not apply, is not working or no partner
    1 - employees in public and economic administration
    2 - employees - experts in engineering professions
    3 - employees - experts in non-engineering professions
    4 - employees - in professions connected with  transport,
        trade and communication, and services
    5 - factory workers and similar professions
    6 - workers in construction and related professions
    7 - workers and unskilled workers
    8 - self-employed outside agriculture
    9 - employed as experts in agriculture and forestry
   10 - agricultural and forest workers
   11 - individual farmers
   12 - others
D1PO11R 3       106     2       prestige in the additional job of respondent
   -1 - no data available due to interviewers
    0 - does not apply, is not working
    1 - supervising a group of persons who have subordinates
    2 - supervising a group of persons who have no subordinates
    3 - executive standing
D1PO11W 3       109     2       prestige in the additional job of partner
```

```
   -1 - no data available due to interviewers
    0 - does not apply, is not working or no  partner
    1 - supervising a group of persons who have subordinates
    2 - supervising a group of persons who have no subordinates
    3 - executive standing
D1PO12RMM        3      112     2       month of birth of respondent's mother
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    0 - does not apply, no partner
    lower limit:  1,   upper limit:  12
D1PO12RMR        3      114     2       year of birth of respondent's mother
   -1 - no data available due to respondents
    0 - does not apply, no partner
    lower limit:  00,   upper limit:  54
D1PO12WMM        3      117     2       month of birth of mother of partner
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    0 - does not apply, no partner
    lower limit:  1,   upper limit:  12
D1PO12WMR        3      119     2       year of birth of mother of partner
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    0 - does not apply, no partner
    lower limit:  00,   upper limit:  55
D1PO12ROM        3      122     2       month of birth of respondent's father
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    0 - does not apply, no partner
    lower limit:  1,   upper limit:  12
D1PO12ROR        3      124     2       year of  birth of respondent's father
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    lower limit:  00,   upper limit:  55
D1PO12WOM        3      127     2       month of birth of father of partner
   -5 - mistake
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    0 - does not apply, no partner
   23 - mistake
    lower limit:  1,   upper limit:  12
D1PO12WOR        3      129     2       year of birth of father of partner
   -1 - no data available due to respondents
    0 - does not apply, no partner
    lower limit:  1,   upper limit:  50
D1PO13RM         3      132     2       highest level of completed education of mother
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    1 - primary
    2 - basic vocational
    3 - secondary general
    4 - secondary professional
    5 - post-secondary
    6 - higher
    7 - post-graduate
    8 - primary uncompleted
D1PO13WM         3      135     2       highest level of completed education of partner's  mother
```

```
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply, no partner
    1 - primary
    2 - basic vocational
    3 - secondary general
    4 - secondary professional
    5 - post-secondary
    6 - higher
    7 - post-graduate
    8 - primary uncompleted
D1P013RO        3      138     2       highest level of completed education of father
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    1 - primary
    2 - basic vocational
    3 - secondary general
    4 - secondary professional
    5 - post-secondary
    6 - higher
    7 - post-graduate
    8 - primary uncompleted
D1P013WO        3      141     2       highest level of completed education of partner's father
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - data not available, no partner
    1 - primary
    2 - basic vocational
    3 - secondary general
    4 - secondary professional
    5 - post-secondary
    6 - higher
    7 - post-graduate
    8 - primary uncompleted
D1P014RM        3      144     2       socio-occupational group of respondent's mother
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply, is not working
    1 - employees in public and economic administration
    2 - employees - experts in engineering professions
    3 - employees - experts in non-engineering professions
    4 - employees - in professions connected with  transport,
        trade and communication, and services
    5 - factory workers and similar professions
    6 - workers in construction and related professions
    7 - workers and unskilled workers
    8 - self-employed outside agriculture
    9 - employed as experts in agriculture and forestry
   10 - agricultural and forest workers
   11 - individual farmers
   12 - others
D1P014WM        3      147     2       socio-occupational group of mother of partner
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply, is not working or no partner
    1 - employees in public and economic administration
```

```
    2 - employees - experts in engineering professions
    3 - employees - experts in non-engineering  professions
    4 - employees - in professions connected with transport,
        trade and communication, and services
    5 - factory workers and similar professions
    6 - workers in construction and related professions
    7 - workers and unskilled workers
    8 - self-employed outside agriculture
    9 - employed as experts in agriculture and forestry
   10 - agricultural and forest workers
   11 - individual farmers
   12 - others
D1P014R0        3      150     2       socio-occupational group of respondent's father
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply, is not working
    1 - employees in public and economic administration
    2 - employees - experts in engineering professions
    3 - employees - experts in non-engineering professions
    4 - employees - in professions connected with transport,
        trade and communication, and services
    5 - factory workers and similar professions
    6 - workers in construction and related professions
    7 - workers and unskilled workers
    8 - self-employed outside agriculture
    9 - employed as experts in agriculture and forestry
   10 - agricultural and forest workers
   11 - individual farmers
   12 - others
D1P014W0        3      153     2       socio-occupational group of father of partner
   -1 - no data available due to interviewers
    0 - does not apply, is not working or no partner
    1 - employees in public and economic administration
    2 - employees - experts in engineering professions
    3 - employees - experts in non-engineering professions
    4 - employees - in professions connected with transport,
        trade and communication, and services
    5 - factory workers and similar professions
    6 - workers in construction and related professions
    7 - workers and unskilled workers
    8 - self-employed outside agriculture
    9 - employed as experts in agriculture and forestry
   10 - agricultural and forest workers
   11 - individual farmers
   12 - others
D1P015R 3       156     2       live born children by respondent's mother
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    0 - no child (respondent adopted)
    lower limit:  1,   upper limit:  17
D1P015W 3       159     2       live born children by mother of respondent's partner
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    0 - no child (respondent adopted) or no partner
    lower limit:  1,   upper limit:  17
D1P016R 3       162     2       category of respondent's residence up to age 15
```

```
   -1 - no data available due to respondents
    1 - urban - 100,000+ inhabitants
    2 - urban - 20,000 - 99,999 inhabitants
    3 - urban - < 20,000 inhabitants
    4 - rural
D1PO16W 3       165     2       category of residence of respondent's partner up  to age 15
   -1 - no data available due to interviewers
    0 - does not apply, no partner
    1 - urban - 100,000+ inhabitants
    2 - urban - 20,000 - 99,999 inhabitants
    3 - urban - < 20,000 inhabitants
    4 - rural
D1PO17R 3       168     2       composition of household of origin up to age 15
   -1 - no data available due to interviewers
    1 - with both parents
    2 - with father only
    3 - with mother only
    4 - with neither parent
D1PO17W 3       171     2       composition of household of origin of partner
   -1 - no data available due to interviewers
    0 - does not apply, no partner
    1 - with both parents
    2 - with father only
    3 - with mother only
    4 - with neither parent
D1PO18R 3       174     2       separation/divorce of respondent's parents
   -1 - no data available due to interviewers
    1 - parents living together
    2 - parents are separated
    3 - parents are divorced
    4 - does not apply, father(mother) died
    5 - does not apply, both parents died
    6 - parents living separately from other reason
    7 - respondent does not know his/her parents
D1PO18W 3       177     2       separation/divorce of parents of partner
   -1 - no data available due to interviewers
    0 - does not apply, no partner
    1 - parents living together
    2 - parents are separated
    3 - parents are divorced
    4 - does not apply, father(mother) died
    5 - does not apply, both parents died
    6 - parents living separately from other reason
    7 - respondent does not know his/her parents
D1PO19R 3       180     2       respondent's age at parent's sep/divorce
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    0 - does not apply
    lower limit:  1,   upper limit:  55
D1PO19W 3       183     2       age of respondent's partner at parent's  separation/divorce
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    0 - does not apply
    lower limit:  1,   upper limit:  89
D1PO201RM       3       186     2       month of first leaving parental home by respondent
   -1 - no data available due to respondents
```

```
    0 - does not apply
    lower limit:  1,   upper limit:  12
D1PO201RR       3      188     2       year of first leaving parental home by respondent
   -1 - no data available due to respondents
    0 - does not apply, no partner
    lower limit:  41,   upper limit:  91
D1PO201WM       3      191     2   month of first leaving parental home by partner
   -1 - no data available due to respondents
    0 - does not apply
    lower limit:  1,   upper limit:  12
D1PO201WR       3      193     2   year of first leaving parental home by partner
   -1 - no data available due to respondents
    0 - does not apply, no partner
    lower limit:  41,   upper limit:  91
D1PO202RM       3      196     2       month of last leaving parental home by respondent
   -1 - no data available due to respondents
    0 - does not apply
    lower limit:  1,   upper limit:  12
D1PO202RR       3      198     2       year of last leaving parental home by respondent
   -1 - no data available due to respondents
    0 - does not apply, no partner
    lower limit:  44,   upper limit:  91
D1PO202WM       3      201     2       month of last leaving parental home by respondent's partner
   -1 - no data available due to respondents
    0 - does not apply
    lower limit:  1,   upper limit:  12
D1PO202WR       3      203     2       year of last leaving parental home by respondent's partner
   -1 - no data available due to respondents
    0 - does not apply, no partner
    lower limit:  44,   upper limit:  91
D1PO21R 3       206     2       religiousness of respondent
   -2 - no data available due to respondents
   -1 - no data available due to respondents
    1 - very religious and regularly practicing
    2 - religious and regularly practicing
    3 - religious, but practicing not regularly
    4 - religious, but not practicing
    5 - neither practicing nor not practicing
    6 - not religious but attached to religious tradition
    7 - not religious but practicing for environment sake
    8 - a convinced atheist
    9 - does not know
D1PO21W 3       209     2       religiousness of respondent's partner
   -2 - no data available due to respondents
    0 - does not apply, no partner
    1 - very religious and regularly practicing
    2 - religious and regularly practicing
    3 - religious, but practicing not regularly
    4 - religious, but not practicing
    5 - neither practicing nor not practicing
    6 - not religious but attached to religious tradition
    7 - not religious but practicing for environment sake
    8 - a convinced atheist
    9 - does not know
D1PO22R 3       212     2       frequency of church services attendance
   -2 - no data available due to respondents
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   -1 - no data available due to interviewers
    1 - some times a week
    2 - regularly at the time of holy days
    3 - two or three times a month
    4 - once a month
    5 - at the time of holy days
    6 - once a year or rarer
    7 - occasionally at the time of christenings, weddings,funerals
    8 - no attendance for years
D1PO22W 3       215     2       frequency of church services attendance, partner
   -2 - no data available due to respondents
    0 - does not apply, no partner
    1 - some times a week
    2 - regularly at the time of holy days
    3 - two or three times a month
    4 - once a month
    5 - at the time of holy days
    6 - once a year or rarer
    7 - occasionally at the time of christening, weddings,funerals
    8 - no attendance for years
D1PO23R 3       218     2       religious affiliation of respondent
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    1 - roman-catholic
    2 - orthodox
    3 - protestant
    4 - other
    5 - no religious affiliation
D1PO23W 3       221     2       religious affiliation of respondent's partner
   -2 - no data available due to respondents
    0 - does not apply, no respondent
    1 - roman-catholic
    2 - orthodox
    3 - protestant
    4 - other
    5 - no religious affiliation
D2PO6   3       224     2       intention to improve education within 2 years
   -1 - no data available due to interviewers
    0 - does not apply, is attending school
    1 - yes
    2 - no
    3 - does not know
D3P14   3       227     2       intention to take a job within 6 months
   -1 - no data available due to interviewers
    0 - does not apply, is working
    1 - yes
    2 - no
    3 - does not know
D4PO4   3       230     2       intention to change residence within 2 years
   -1 - no data available due to interviewers
    0 - does not apply, is moving
    1 - yes
    2 - no
    3 - does not know
D5PO8   3       233     2       intention to change dwelling within 2 years
   -1 - no data available due to interviewers
```

```
    0 - does not apply, is moving
    1 - yes
    2 - no
    3 - does not know
D6P01   3       236     2       fact of having own family
   -2 - no data available due to interviewers
    1 - yes
    2 - no
D6P02   3       239     2       fertility preferences of person not having own family
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    0 - does not want to have any children at all
    1 - wants to have one child
    2 - wants to have two children
    3 - wants to have three children
    4 - wants to have four or more children
    5 - wants to have children, but does not know, how many
    6 - does not know
D6P03   3       242     2       fertility preferences of person having own family
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    0 - did not want to have any children at all
    1 - wanted to have one child
    2 - wanted to have two children
    3 - wanted to have three children
    4 - wanted to have four or more children
    5 - wanted to have children, but did not know, how any
    6 - did not know
D6P041  3       245     2       total number of children in family
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    0 - lower limit of children
   10 - upper limit of children
D6P042  3       248     2       number of own children
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    0 - lower limit of own children
   10 - upper limit of own children
D6P043  3       251     2       number of stepchildren
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    0 - lower limit of stepchildren
    6 - upper limit of stepchildren
D6P044  3       254     2       number of adopted children
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    0 - lower limit of adopted children
    2 - upper limit of adopted children
D6P045  3       257     2       number of foster children
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    0 - lower limit of adopted children
    1 - upper limit of adopted children
D6P05   3       260     2       total number of pregnancies
   -1 - no data available due to interviewers
    0 - lower number of pregnancies
```

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   10 - upper number of pregnancies
D6P06   3       263     2       number of live born children
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - lower limit of live born children
   10 - upper limit of live born children
D6P07   3       266     2       number of living children
   -1 - no data available due to interviewers
    0 - lower limit of living children
   10 - upper limit of living children
D6P08   3       269     2       number of children residing in the interviewed household
   -1 - no data available due to interviewers
    0 - lower limit of residing children
   10 - upper limit of residing children
D6P091  3       272     2       number of pregnancies ended by stillbirths
   -1 - no data available due to interviewers
    0 - lower limit of stillbirths
    2 - upper limit of stillbirths
D6P092  3       275     2       number of pregnancies ended by miscarriages
   -1 - no data available due to interviewers
    0 - lower limit of miscarriages
    7 - upper limit of miscarriages
D6P35   3       278     2       intention to have any-more children in the future
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - yes, respondent (partner) currently pregnant
    1 - yes, wants to have one child more
    2 - yes, wants to have two children more
    3 - yes, wants to have three or more children
    4 - yes, wants to have children, does not know, how any
    5 - it is not unlikely
    6 - no, does not intend
    7 - it is out of the question
    8 - can not have any more children
    9 - does not know
D6P361  3       281     2       first child
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    1 - respondent(partner) currently pregnant
    2 - next year
    3 - next two years
    4 - next three years
    5 - next four years
    6 - next five years
    7 - next six or more years
    8 - as soon as possible considering health conditions
    9 - does not know
D6P362  3       283     2       second child
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    1 - respondent(partner) currently pregnant
    2 - next year
    3 - next two years
    4 - next three years
    5 - next four years
    6 - next five years
```

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    7 - next six or more years
    8 - as soon as possible considering health conditions
    9 - does not know
D6P363  3       285     2       third child
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    1 - respondent(partner) currently pregnant
    2 - next year
    3 - next two years
    4 - next three years
    5 - next four years
    6 - next five years
    7 - next six or more years
    8 - as soon as possible considering health conditions
    9 - does not know
D6P364  3       287     2       fourth child
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    1 - respondent(partner) currently pregnant
    2 - next year
    3 - next two years
    4 - next three years
    5 - next four years
    6 - next five years
    7 - next six or more years
    8 - as soon as possible considering health conditions
    9 - does not know
D6P365  3       289     2       fifth child
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    1 - respondent(partner) currently pregnant
    2 - next year
    3 - next two years
    4 - next three years
    5 - next four years
    6 - next five years
    7 - next six or more years
    8 - as soon as possible considering health conditions
    9 - does not know
D6P366  3       291     2       sixth child
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    1 - respondent(partner) currently pregnant
    2 - next year
    3 - next two years
    4 - next three years
    5 - next four years
    6 - next five years
    7 - next six or more years
    8 - as soon as possible considering health conditions
    9 - does not know
D6P367  3       293     2       last child
   -1 - no data available due to interviewers
    0 - does not apply, respondent does not intend to have any
        more child
    1 - respondent(partner) currently pregnant
```

```
    2 - next year
    3 - next two years
    4 - next three years
    5 - next four years
    6 - next five years
    7 - next six or more years
    8 - as soon as possible considering health conditions
    9 - does not know
D6P37   3       296     2   main reason for intention of not having more children
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply, respondent intends to have more  children
    1 - age
    2 - health conditions
    3 - has sufficient number of children
    4 - can not have any more children
    5 - partner does not want to have any more children
    6 - difficult economic situation of family
    7 - difficult housing conditions
    8 - incompatibility to work in the household and to take a job
    9 - wants to have more free time for himself/herself
D6P38   3       299     2   ideal number of children in the family
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - lower limit of ideal number of children
    8 - upper limit of ideal number of children
    9 - does not know
D6P391  3       302     2   children make it less likely that one will be lonely in old age
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    1 - factor important
    2 - factor not important
    3 - does not know
D6P392  3       304     2   children give a sense of responsibility
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    1 - factor important
    2 - factor not important
    3 - does not know
D6P393  3       306     2   having children gives a special feeling of satisfaction
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    1 - factor important
    2 - factor not important
    3 - does not know
D6P394  3       308     2   it gives satisfaction to see the family go on
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    1 - factor important
    2 - factor not important
    3 - does not know
D6P395  3       310     2   having children strengthens the relationship with the partner
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    1 - factor important
    2 - factor not important
```

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    3 - does not know
D6P396  3       312     2   having children is one of the most important aims of marriage
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    1 - factor important
    2 - factor not important
    3 - does not know
D6P397  3       314     2   child can help his/her parents in their old age
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    1 - factor important
    2 - factor not important
    3 - does not know
D6P40   3       317     2   main factor for having children
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply, none factor important
    1 - children make  it less likely that one will be lonely in old age
    2 - children give a sense of responsibility and help a persons
        to develop
    3 - having children gives a special feeling of joy and
         satisfaction
    4 - it gives satisfaction to see the family go on
    5 - having children strengthens the relationship with the
        partner
    6 - having children is one of the most important aims of
        marriage
    7 - child can help his/her parents in their old age
D6P411  3       320     2   children are financial burden for the family
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    1 - factor important
    2 - factor not important
    3 - does not know
D6P412  3       322     2   children make it harder for woman to have a job
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    1 - factor important
    2 - factor not important
    3 - does not know
D6P413  3       324     2   pregnancies, deliveries and the care of children are difficult for women
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    1 - factor important
    2 - factor not important
    3 - does not know
D6P414  3       326     2   children limit parents' freedom to do the things they enjoy
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    1 - factor important
    2 - factor not important
    3 - does not know
D6P415  3       328     2   bringing up children entails a lot of worries
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    1 - factor important
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    2 - factor not important
    3 - does not know
D6P416  3       330     2   the lack of sufficient housing for a larger family
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    1 - factor important
    2 - factor not important
    3 - does not know
D6P417  3       332     2   partner does not want to have a(nother) child(ren)
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    1 - factor important
    2 - factor not important
    3 - does not know
D6P42   3       335     2   main factor for not having children
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply, none factor important
    1 - children are a financial burden for the family
    2 - children make it harder for a woman to have a job
    3 - pregnancies, deliveries and the care of  children are difficult
        for a  woman
    4 - children limit parents' freedom to do the things they enjoy
    5 - bringing up children and caring for them entails a lot of
        worries and problems
    6 - the lack of sufficient housing for a larger family
    7 - partner does not want to have a(nother) child(ren)
D7P01   3       338     2   respondent ever married
   -2 - no data available due to respondents
    0 - mistake
    1 - yes
    2 - no
D7P02   3       341     2   number of marriages
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply, no marriages
    1 - lower number of marriages
    6 - upper number of marriages
D7P03   3       344     2   present partner currently living in the household
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply, no marriages
    1 - yes
    2 - not anymore
    3 - not yet
D7P21   3       347     2   ever cohabited
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    1 - yes
    2 - no
    3 - it is my matter
D7P22   3       350     2   number of cohabiting partners
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply, no cohabitations
```

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    1 - lower number of cohabitations
    9 - upper limit of cohabitations
D7P23   3       353     2   currently cohabiting
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 -  mistake
    1 - yes
    2 - no
    3 - it is my matter
D7P24   3       356     2   intimate relationship with partner living  separately
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    1 - yes
    2 - no
    3 - it is my matter
D7P25   3       359     2   intention to change partnership within 2 years
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    1 - yes
    2 - no
    3 - does not know
D7P261  3       362     2   mutual faithfulness
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    1 - important
    2 - not important
    3 - does not know
D7P262  3       364     2   sharing household activities
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    1 - important
    2 - not important
    3 - does not know
D7P263  3       366     2   mutual respect and appreciation
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    1 - important
    2 - not important
    3 - does not know
D7P264  3       368     2   satisfactory sexual relationship
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    1 - important
    2 - not important
    3 - does not know
D7P265  3       370     2   mutual understanding and tolerance
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    1 - important
```

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    2 - not important
    3 - does not know
D7P266  3       372     2   uniformity of religious views
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    1 - important
    2 - not important
    3 - does not know
D7P267  3       374     2   mutual interest and fondness of unreligious character
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    1 - important
    2 - not important
    3 - does not know
D7P268  3       376     2   having children
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    1 - important
    2 - not important
    3 - does not know
D7P269  3       378     2   being of the same social background
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    1 - important
    2 - not important
    3 - does not know
D7P2610 3       380     2   proper housing conditions
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    1 - important
    2 - not important
    3 - does not know
D7P2611 3       382     2   satisfactory economic conditions
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    1 - important
    2 - not important
    3 - does not know
D7P27   3       385         main factor for stability of partnership
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply, no factor important
    1 - mutual faithfulness
    2 - sharing household activities
    3 - mutual respect and appreciation
    4 - satisfactory sexual relationship
    5 - mutual understanding and tolerance
    6 - uniformity of religious views
    7 - mutual interests and fondness of unreligious character
    8 - having children
```

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    9 - being of the same background
   10 - proper housing conditions
   11 - satisfactory economic conditions
D7P281  3       388     2   one of partners drinks too much
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    1 - important
    2 - not important
    3 - does not know
D7P282  3       390     2   lack of love, one of partners is bored with the relationship
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    1 - important
    2 - not important
    3 - does not know
D7P283  3       392     2   partners' personalities do not match
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    1 - important
    2 - not important
    3 - does not know
D7P284  3       394     2   one of partners is violent
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    1 - important
    2 - not important
    3 - does not know
D7P285  3       396     2   unsatisfactory sharing of household activities
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    1 - important
    2 - not important
    3 - does not know
D7P286  3       398     2   unfaithfulness
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    1 - important
    2 - not important
    3 - does not know
D7P287  3       400     2   unsatisfactory sexual relationship
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    1 - important
    2 - not important
    3 - does not know
D7P288  3       402     2   one of partners does not want to have or cannot have any children
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
```

```
    1 - important
    2 - not important
    3 - does not know
D7P289  3       404     2   disagreement concerning the number of children
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    1 - important
    2 - not important
    3 - does not know
D7P2810 3       406     2   disagreement related to unsatisfactory housing conditions
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    1 - important
    2 - not important
    3 - does not know
D7P2811 3       408     2   disagreement related to unsatisfactory economic conditions
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    1 - important
    2 - not important
    3 - does not know
D7P29   3       411     2   main factor for instability of partnership
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply, no factor important
    1 - one of partners drinks too much
    2 - lack of love, one of partners is bored with the relationship
    3 - partners' personalities do not match
    4 - one of partners is violent
    5 - unsatisfactory sharing of household activities
    6 - unfaithfulness
    7 - unsatisfactory sexual relationship
    8 - one of partners does not want to have any child(ren)
    9 - disagreement concerning the number of children
   10 - disagreement related to unsatisfactory housing conditions
   11 - disagreement related to unsatisfactory economic conditions
   21 - mistake
D7P301  3       414     2   marriage is an outdated institution
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    1 - yes
    2 - no
    3 - does not know
D7P302  3       416     2 if a woman wants to have a child as a single parent she should be able to
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    1 - yes
    2 - no
    3 - does not know
D7P303  3       418     2   more emphasis on family life
   -2 - no data available due to respondents
```

```
   -1 - no data available due to interviewers
    0 - mistake
    1 - yes
    2 - no
    3 - does not know
D7P31   3       421     2   views on parental responsibilities
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    1 - it is the parents' duty to do their best for  their children,
        even at the expense of their own well-being
    2 - parents have a life of their own and should not sacrifice their own
        well-being for the sake of their children
    3 - none of these statements
    4 - does not know
D7P321  3       424     2   having a successful partnership is most important
   -1 - no data available due to interviewers
    0 - mistake
    1 - yes
    2 - no
    3 - does not know
D7P322  3       426     2   I work hard to build a good relationship
   -1 - no data available due to interviewers
    0 - mistake
    1 - yes
    2 - no
    3 - does not know
D7P323  3       428     2   it is important to have an occupational career
   -1 - no data available due to interviewers
    0 - mistake
    1 - yes
    2 - no
    3 - does not know
D7P324  3       430     2   I make as many sacrifices as necessary to advance my career
   -1 - no data available due to interviewers
    0 - mistake
    1 - yes
    2 - no
    3 - does not know
D7P331  3       433     2   preparing daily meals
   -1 - no data available due to interviewers
    0 - mistake
    1 - respondent him/herself
    2 - partner
    3 - both
    4 - other members of household
    5 - other persons not belonging to household
    6 - does not apply
D7P332  3       435     2   vacuum-cleaning
   -1 - no data available due to interviewers
    0 - mistake
    1 - respondent him/herself
    2 - partner
    3 - both
    4 - other members of household
    5 - other persons not belonging to household
```

```
    6 - does not apply
D7P333  3       437     2   shopping
   -1 - no data available due to interviewers
    0 - mistake
    1 - respondent him/herself
    2 - partner
    3 - both
    4 - other members of household
    5 - other persons not belonging to household
    6 - does not apply
D7P334  3       439     2   keeping the household budget
   -1 - no data available due to interviewers
    0 - mistake
    1 - respondent him/herself
    2 - partner
    3 - both
    4 - other members of household
    5 - other persons not belonging to household
    6 - does not apply
D7P335  3       441     2   filling out the tax forms
   -1 - no data available due to interviewers
    0 - mistake
    1 - respondent him/herself
    2 - partner
    3 - both
    4 - other members of household
    5 - other persons not belonging to household
    6 - does not apply
D7P336  3       443     2   doing the dishes
   -1 - no data available due to interviewers
    0 - mistake
    1 - respondent him/herself
    2 - partner
    3 - both
    4 - other members of household
    5 - other persons not belonging to household
    6 - does not apply
D7P337  3       445     2   looking after the elderly
   -1 - no data available due to interviewers
    0 - mistake
    1 - respondent him/herself
    2 - partner
    3 - both
    4 - other members of household
    5 - other persons not belonging to household
    6 - does not apply
D7P341  3       448     2   taking care of children's meals
   -1 - no data available due to interviewers
    0 - mistake
    1 - respondent him/herself
    2 - partner
    3 - both
    4 - other members of household
    5 - other persons not belonging to household
    6 - does not apply
    8 - mistake
```

```
D7P342  3       450     2   getting children dressed
   -1 - no data available due to interviewers
    0 - mistake
    1 - respondent him/herself
    2 - partner
    3 - both
    4 - other members of household
    5 - other persons not belonging to household
    6 - does not apply
    8 - mistake
D7P343  3       452     2   looking after children when they are ill
   -1 - no data available due to interviewers
    0 - mistake
    1 - respondent him/herself
    2 - partner
    3 - both
    4 - other members of household
    5 - other persons not belonging to household
    6 - does not apply
    8 - mistake
D7P344  3       454     2   playing with children
   -1 - no data available due to interviewers
    0 - mistake
    1 - respondent him/herself
    2 - partner
    3 - both
    4 - other members of household
    5 - other persons not belonging to household
    6 - does not apply
    8 -  mistake
D7P345  3       456     2   helping children with their homework
   -1 - no data available due to interviewers
    0 - mistake
    1 - respondent him/herself
    2 - partner
    3 - both
    4 - other members of household
    5 - other persons not belonging to household
    6 - does not apply
    8 - mistake
D8P01   3       459     2   age at sexual initiation
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    0 - does not apply, no sexual intercourse
    1 - mistake
   10 - lower limit of age
   40 - upper limit of age
D8P02   3       462     2   age at regular sexual life
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    0 - does not apply, no sexual intercourse
    1 - mistake
   11 - lower limit of age
   44 - upper limit of age
D8P031  3       465     2   sexual abstinence
   -2 - no data available due to interviewers
```

```
   -1 - no data available due to respondents
    0 - mistake
    1 - yes
    2 - no
D8P032  3       467     2   withdrawal (coitus interruptus)
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    0 - mistake
    1 - yes
    2 - no
D8P033  3       469     2   rhythm method - calendar (Ogino-Knaus' method)
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    0 - mistake
    1 - yes
    2 - no
D8P034  3       471     2   rhythm method - measurement of temperature
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    0 - mistake
    1 - yes
    2 - no
D8P035  3       473     2   rhythm method - Billings' ovulation method
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    0 - mistake
    1 - yes
    2 - no
D8P036  3       475     2   condom
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    0 - mistake
    1 - yes
    2 - no
D8P037  3       477     2   chemical measures (foam, jelly, diaphragm)
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    0 - mistake
    1 - yes
    2 - no
D8P038  3       479     2   intra-uterine device
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    0 - mistake
    1 - yes
    2 - no
D8P039  3       481     2   pill
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    0 - mistake
    1 - yes
    2 - no
D8P0310 3       483     2   sterilization
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    0 - mistake
```

```
    1 - yes
    2 - no
D8P04   3       486     2   ever used contraception
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    0 - mistake
    1 - yes
    2 - no
D8P05   3       489     2   method used as first
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    0 - does not apply, no method used
    1 - sexual abstinence
    2 - withdrawal (coitus interruptus)
    3 - rhythm method - calendar (Ogino Knaus' method)
    4 - rhythm method - measurement of temperature
    5 - rhythm method - Billings' ovulation method
    6 - condom
    7 - chemical measures (foam, jelly, diaphragm)
    8 - intra-uterine device
    9 - pill
   10 - sterilization
   20 - mistake
D8P06   3       492     2   age at first use of contraception
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    0 - does not apply, no method used
    1 - mistake
    2 - mistake
    3 - mistake
    6 - mistake
   13 - lower limit of age
   56 - upper limit of age
D8P0711 3       495     20  methods and measures used at time of first intercourse
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    0 - does not apply, no method used
    1 - sexual abstinence
    2 - withdrawal (coitus interruptus)
    3 - rhythm method - calendar (Ogino Knaus' method)
    4 - rhythm method - measurement of temperature
    5 - rhythm method - Billings' ovulation method
    6 - condom
    7 - chemical measures (foam, jelly, diaphragm)
    8 - intra-uterine device
    9 - pill
   10 - sterilization
D8P0712  3      515     20  methods and measures used before first pregnancy
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    0 - does not apply, no method used
    1 - sexual abstinence
    2 - withdrawal (coitus interruptus)
    3 - rhythm method - calendar (Ogino Knaus' method)
    4 - rhythm method - measurement of temperature
    5 - rhythm method - Billings' ovulation method
```

```
    6 - condom
    7 - chemical measures (foam, jelly, diaphragm)
    8 - intra-uterine device
    9 - pill
   10 - sterilization
D8P0713  3      535     20  methods and measures used before second pregnancy
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    0 - does not apply, no method used
    1 - sexual abstinence
    2 - withdrawal (coitus interruptus)
    3 - rhythm method - calendar (Ogino Knaus' method)
    4 - rhythm method - measurement of temperature
    5 - rhythm method - Billings' ovulation method
    6 - condom
    7 - chemical measures (foam, jelly, diaphragm)
    8 - intra-uterine device
    9 - pill
   10 - sterilization
D8P0714  3      555     20  methods and measures used before third pregnancy
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    0 - does not apply, no method used
    1 - sexual abstinence
    2 - withdrawal (coitus interruptus)
    3 - rhythm method - calendar (Ogino Knaus' method)
    4 - rhythm method - measurement of temperature
    5 - rhythm method - Billings' ovulation method
    6 - condom
    7 - chemical measures (foam, jelly, diaphragm)
    8 - intra-uterine device
    9 - pill
   10 - sterilization
D8P0721 3       576     20  methods and measures used before fourth pregnancy
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    0 - does not apply, no method used
    1 - sexual abstinence
    2 - withdrawal (coitus interruptus)
    3 - rhythm method - calendar (Ogino Knaus' method)
    4 - rhythm method - measurement of temperature
    5 - rhythm method - Billings' ovulation method
    6 - condom
    7 - chemical measures (foam, jelly, diaphragm)
    8 - intra-uterine device
    9 - pill
   10 - sterilization
D8P0722 3       596     20  methods and measures used before fifth pregnancy
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    0 - does not apply, no method used
    1 - sexual abstinence
    2 - withdrawal (coitus interruptus)
    3 - rhythm method - calendar (Ogino Knaus' method)
    4 - rhythm method - measurement of temperature
    5 - rhythm method - Billings' ovulation method
```

```
    6 - condom
    7 - chemical measures (foam, jelly, diaphragm)
    8 - intra-uterine device
    9 - pill
   10 - sterilization
D8P0723 3       616     20  methods and measures used before last pregnancy
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    0 - does not apply, no method used
    1 - sexual abstinence
    2 - withdrawal (coitus interruptus)
    3 - rhythm method - calendar (Ogino Knaus' method)
    4 - rhythm method - measurement of temperature
    5 - rhythm method - Billings' ovulation method
    6 - condom
    7 - chemical measures (foam, jelly, diaphragm)
    8 - intra-uterine device
    9 - pill
   10 - sterilization
D8P0724  3      636     20  methods and measures used within the last four weeks
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    0 - does not apply, no method used
    1 - sexual abstinence
    2 - withdrawal (coitus interruptus)
    3 - rhythm method - calendar (Ogino Knaus' method)
    4 - rhythm method - measurement of temperature
    5 - rhythm method - Billings' ovulation method
    6 - condom
    7 - chemical measures (foam, jelly, diaphragm)
    8 - intra-uterine device
    9 - pill
   10 - sterilization
D8P081  3       657     2   first method that will be used in future
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    0 - does not apply, no method will be used
    1 - sexual abstinence
    2 - withdrawal (coitus interruptus)
    3 - rhythm method - calendar (Ogino Knaus' method)
    4 - rhythm method - measurement of temperature
    5 - rhythm method - Billings' ovulation method
    6 - condom
    7 - chemical measures (foam, jelly, diaphragm)
    8 - intra-uterine device
    9 - pill
   10 - sterilization
D8P082  3       659     2   second method that will be used in future
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    0 - does not apply, no method will be used
    1 - sexual abstinence
    2 - withdrawal (coitus interruptus)
    3 - rhythm method - calendar (Ogino Knaus' method)
    4 - rhythm method - measurement of temperature
    5 - rhythm method - Billings' ovulation method
```

```
    6 - condom
    7 - chemical measures (foam, jelly, diaphragm)
    8 - intra-uterine device
    9 - pill
   10 - sterilization
D8P083  3       661     2   third method that will be used in future
   -2 - no data available due to interviewers
   -1 - no data available due to respondents
    0 - does not apply, no method will be used
    1 - sexual abstinence
    2 - withdrawal (coitus interruptus)
    3 - rhythm method - calendar (Ogino Knaus' method)
    4 - rhythm method - measurement of temperature
    5 - rhythm method - Billings' ovulation method
    6 - condom
    7 - chemical measures (foam, jelly, diaphragm)
    8 - intra-uterine device
    9 - pill
   10 - sterilization
D8P09   3       664     10  reasons of not using separate methods and measures
D8P091  3       664     10  withdrawal
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply, method (will be) used
    1 - unhealthy for female
    2 - negative effects on fertility or offspring
    3 - afraid of physical side-effects
    4 - not effective (fear of pregnancy)
    5 - not accepted by church
    6 - too definitive, irreversible
    7 - difficulties in use
    8 - partner did not (does not) accept the use
    9 - other
   10 - did (does) not want to use any methods
   11 - does not know, why
D8P092  3       675     10  calendar method
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply, method (will be) used
    1 - unhealthy for female
    2 - negative effects on fertility or offspring
    3 - afraid of physical side-effects
    4 - not effective (fear of pregnancy)
    5 - not accepted by church
    6 - too definitive, irreversible
    7 - difficulties in use
    8 - partner did not (does not) accept the use
    9 - other
   10 - did (does) not want to use any methods
   11 - does not know, why
D8P093  3       686     10  temperature method
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply, method (will be) used
    1 - unhealthy for female
    2 - negative effects on fertility or offspring
```

```
     3 - afraid of physical side-effects
     4 - not effective (fear of pregnancy)
     5 - not accepted by church
     6 - too definitive, irreversible
     7 - difficulties in use
     8 - partner did not (does not) accept the use
     9 - other
    10 - did (does) not want to use any methods
    11 - does not know, why
D8P094  3       697     10  Billings' method
    -2 - no data available due to respondents
    -1 - no data available due to interviewers
     0 - does not apply, method (will be) used
     1 - unhealthy for female
     2 - negative effects on fertility or offspring
     3 - afraid of physical side-effects
     4 - not effective (fear of pregnancy)
     5 - not accepted by church
     6 - too definitive, irreversible
     7 - difficulties in use
     8 - partner did not (does not) accept the use
     9 - other
    10 - did (does) not want to use any methods
    11 - does not know, why
D8P095  3       708     10  condom
    -2 - no data available due to respondents
    -1 - no data available due to interviewers
     0 - does not apply, method (will be) used
     1 - unhealthy for female
     2 - negative effects on fertility or offspring
     3 - afraid of physical side-effects
     4 - not effective (fear of pregnancy)
     5 - not accepted by church
     6 - too definitive, irreversible
     7 - difficulties in use
     8 - partner did not (does not) accept the use
     9 - other
    10 - did (does) not want to use any methods
    11 - does not know, why
D8P096  3       719     10  chemical measures
    -2 - no data available due to respondents
    -1 - no data available due to interviewers
     0 - does not apply, method (will be) used
     1 - unhealthy for female
     2 - negative effects on fertility or offspring
     3 - afraid of physical side-effects
     4 - not effective (fear of pregnancy)
     5 - not accepted by church
     6 - too definitive, irreversible
     7 - difficulties in use
     8 - partner did not (does not) accept the use
     9 - other
    10 - did (does) not want to use any methods
    11 - does not know, why
D8P097  3       730     10  intra-uterine device
    -2 - no data available due to respondents
```

```
   -1 - no data available due to interviewers
    0 - does not apply, method (will be) used
    1 - unhealthy for female
    2 - negative effects on fertility or offspring
    3 - afraid of physical side-effects
    4 - not effective (fear of pregnancy)
    5 - not accepted by church
    6 - too definitive, irreversible
    7 - difficulties in use
    8 - partner did not (does not) accept the use
    9 - other
   10 - did (does) not want to use any methods
   11 - does not know, why
D8P098  3       741     10  pill
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply, method (will be) used
    1 - unhealthy for female
    2 - negative effects on fertility or offspring
    3 - afraid of physical side-effects
    4 - not effective (fear of pregnancy)
    5 - not accepted by church
    6 - too definitive, irreversible
    7 - difficulties in use
    8 - partner did not (does not) accept the use
    9 - other
   10 - did (does) not want to use any methods
   11 - does not know, why
D8P099  3       752     10  sterilization
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply, method (will be) used
    1 - unhealthy for female
    2 - negative effects on fertility or offspring
    3 - afraid of physical side-effects
    4 - not effective (fear of pregnancy)
    5 - not accepted by church
    6 - too definitive, irreversible
    7 - difficulties in use
    8 - partner did not (does not) accept the use
    9 - other
   10 - did (does) not want to use any methods
   11 - does not know, why
D8P11   3       763     2   view on sterilization as a method of contraception
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    1 - certainly would not want to be sterilized
    2 - probably would not want to be sterilized
    3 - probably would decide to be sterilized
    4 - certainly will decide to be sterilized
    5 - does not know
D8P12   3       766     2   possible activities in the case of unwanted pregnancy
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
```

```
    1 - continue pregnancy and keep the child
    2 - continue pregnancy but put the child up for adoption
    3 - maybe have an abortion
    4 - certainly have an abortion
    5 - subordinate decision to partners
    6 - does not know
D8P131  3       769     2   mother's life is at risk
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    1 - yes
    2 - no
    3 - does not know
D8P132  3       771     2   mother's health is at risk
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    1 - yes
    2 - no
    3 - does not know
D8P133  3       773     2   a child is likely to be born physically handicapped
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    1 - yes
    2 - no
    3 - does not know
D8P134  3       775     2   woman is not married
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    1 - yes
    2 - no
    3 - does not know
D8P135  3       777     2   a married couple does not want to have any more children
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    1 - yes
    2 - no
    3 - does not know
D8P136  3       779     2   a woman does not wish to have a child for the time being
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    1 - yes
    2 - no
    3 - does not know
D8P137  3       781     2   misunderstandings with partner, alcoholism of child's parents
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    1 - yes
    2 - no
    3 - does not know
D8P138  3       783     2   child's birth makes it impossible to achieve a professional career
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    1 - yes
    2 - no
    3 - does not know
D8P139  3       785     2   no economic conditions for having another child
   -2 - no data available due to respondents
```

```
   -1 - no data available due to interviewers
    1 - yes
    2 - no
    3 - does not know
D8P1310  3      787     2   unsatisfactory housing conditions
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    1 - yes
    2 - no
    3 - does not know
D8P1311  3      789     2   other
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    1 - yes
    2 - no
    3 - does not know
D8P1312  3      791     2   there are no circumstances to approve abortion
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    1 - yes
    2 - no
    3 - does not know
D8P141   3      794     2   fertilization with the sperm of own partner
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    1 - yes
    2 - no
D8P142   3      796     2   fertilization with the sperm of an anonymous man
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    1 - yes
    2 - no
D8P14.3  3      798     2   fertilization in vitro
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    1 - yes
    2 - no
D8P15    3      801     2   knowledge of fertilization in Poland
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    1 - yes
    2 - no
    3 - maybe
    4 - does not know
```

A.4 Educational Careers (ankb2.ds)

The variables described in the present section belong to data file **ankb2.ds**.

```
B2PID    4   0  6   person ID number
B2HHID   4   7  4   household  ID number
B2NRA    4  12  4   number of questionnaire
B2SGO    4  17  9   household identification number
B2TER    4  27  6   territorial symbol
B2KLM    4  34  1   category of place of residence
```

```
    0 - urban -  200,000+ inhabitants
    1 - urban -  100,000- 199,999 inhabitants
    2 - urban -   50,000-  99,999 inhabitants
    3 - urban -   20,000-  49,999 inhabitants
    4 - urban -   10,000-  19,999 inhabitants
    5 - urban -    5,000-   9,999 inhabitants
    6 - urban -  < 5,000 inhabitants
    9 - rural
B2NRO    4  36  2   rank number of person
    lower limit: 1,  upper limit: 12
B2NRK    4  39  2   sequence number of record for person
    lower limit: 1,  upper limit: 6
B2PO1M   4  42  2   month of studies starting point
   -1 - no data available due to interviewers
    0 - mistake
    lower limit: 1,  upper limit: 12
B2PO1R   4  45  2   year of studies starting point
   -1 - no data available due to interviewers
    0 - mistake
    lower limit: 5,  upper limit: 91
B2PO2    4  48  2   type of school
   -1 - no data available due to interviewers
    0 - mistake
    1 - primary day school
    2 - other primary school
    3 - vocational day school
    4 - other vocational  school
    5 - secondary general day school
    6 - other secondary general school
    7 - secondary professional school
    8 - other secondary professional school
    9 - extramural day school
   10 - other extramural school
   11-  day higher school
   12 - other higher school
   13 - post-graduates studies
B2PO3M   4  51  2   month of completing/stopping study
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply (still studying)
    lower limit: 1,  upper limit: 12
B2PO3Y   4  54  2   year of completing/stopping study
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply (still studying)
    lower limit: 36,  upper limit: 91
B2PO4    4  57  2   level of education
   -1 - no data available due to interviewers
    0 - does not apply (still studying)
    1 - primary - not completed
    2 - primary completed
    3 - vocational - not completed
    4 - vocational completed
    5 - secondary general - not completed
    6 - secondary general completed
    7 - secondary professional - not completed
```

```
    8 - secondary professional  completed
    9 - extramural - not completed
   10 - extramural  completed
   11 - higher - not completed
   12 - higher completed
   13 - post-graduate - not completed
   14 - post-graduate completed
B2P051     4  60  2   working full time
   -1 - no data available due to interviewers
    0 - does not apply
    1 - yes
    2 - no
B2P052     4  62  2    working part-time
   -1 - no data available due to interviewers
    0 - does not apply
    1 - yes
    2 - no
B2P053     4  64  2   working irregularly
   -1 - no data available due to interviewers
    0 - does not apply
    1 - yes
    2 - no
```

A.5 Employment Careers (ankb31.ds)

The variables described in the present section belong to data file **ankb31.ds**.

```
B31PID   5   0   6   person ID number
B31HHID  5   7   4   household  ID number
B31NRA   5  12   4   number of questionnaire
B31SGO   5  17   9   household identification number
B31TER   5  27   6   territorial symbol
B31KLM   5  34   1   category of place of residence
    0 - urban -  200,000+ inhabitants
    1 - urban -  100,000- 199,999 inhabitants
    2 - urban -   50,000-  99,999 inhabitants
    3 - urban -   20,000-  49,999 inhabitants
    4 - urban -   10,000-  19,999 inhabitants
    5 - urban -    5,000-   9,999 inhabitants
    6 - urban -  < 5,000 inhabitants
    9 - rural
B31NRO   5  36  2   rank number of person
    lower limit: 1,  upper limit: 12
B31NRK   5  39  2   sequence number of record for person
    lower limit: 1,  upper limit: 10
P01M     5  42  2   month of starting first job
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    lower limit: 1,  upper limit: 12
P01Y     5  45  2   year of starting first job
   -1 - no data available due to interviewers
    0 - mistake
    6 - mistake
    8 - mistake
```

```
   92 - mistake(-1 should repllace 92)
    lower limit: 39,  upper limit: 91
P02      5  48  2   economy division
   -1 - no data available due to interviewers
    0 - mistake
    1 - ownership of the Treasury and state legal entity: state
        administration and control units, the Treasury, administration
        of justice, state-owned enterprises etc.
    2 - ownership of the municipal self-government and
        communal enterprises
    3 - cooperatives
    4 - associations, social organizations, political parties, trade unions,
        economic and professional self-government
    5 - companies/enterprises with share of foreign capital,
        foreign small business enterprises, international organizations
    6 - manufacturing and service enterprises run by natural persons,
        companies of commercial code, individual farms
    7 - Roman-Catholic Church and other churches, religion unions
P03      5  51  2   socio-economic group
   -1 - no data available due to interviewers
    0 - mistake
    1 - employees in public and economic administration (directors and
        management in administration and enterprise political parties,
        social organizations, accountants, clerks, secretaries etc
    2 - employees - experts in engineering professions (deputy-directors
        responsible for technology and manufacturing, chief engineers,
        engineers, lower management staff, headmasters, designers,
        constructors, technicians etc.
    3 - employees - experts in non-engineering professions (performing
        jobs specific for science and education, culture and art,
        medical service and justice, i.e. teachers, physicians, nurses,
        lawyers, journalists, artists etc.)
    4 - employees - in professions connected with transport, trade and
        communication and services (drivers, motor-, engine-drivers,
        station-masters, dispatchers, conductors, seamen, airmen,
        salesmen, waiters, store-keepers, hairdressers, photographers
        etc.)
    5 - factory workers and similar professions (miners, ironworkers,
        fitters, turners, electricians, tailors, shoemakers, bakers,
        confectioners etc.)
    6 - workers in construction and related professions (bricklayers,
        concrete mixers, joiners, carpenters, steel workers, pavers etc.)
    7 - workers and unskilled workers (cleaning staff, housekeepers,
        messengers, ward attendants, doorkeepers, cloakroom
        attendants, porters etc.)
    8 - self-employed outside agriculture (manufacturing fancy goods,
        craftsmen, commissioners, cottage-workers)
    9 - employed as experts in agriculture and forestry (veterinary
        surgeons, agronomists, zoo technicians, foresters)
   10 - agricultural and forest workers (gardeners, orchard men,
        cow keepers, stable-boys, combine harvesters, tractor-drivers,
        woodcutters etc.)
   11 - individual farmers (i.e. owners of agricultural, stock-raising,
        gardening, apiarian individual farms, their family members,
        provided that employment in a farm is the main source of their
        maintenance)
```

```
   12 - others (not classified in the groups mentioned above)
P04      5  54  2   prestige
    0 - mistake
    1 - supervising a group of persons who have subordinates
    2 - supervising a group of persons who have no subordinates
    3 - executive standing
P05      5  57  2   status of employment (part-time, full-time)
   -1 - no data available due to interviewers
    0 - mistake
    1 - more than full-time
    2 - full-time
    3 - part-time
    4 - other form of work
    5 - mistake
P06      5  60  2   working hours
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply
    lower limit: 2,  upper limit: 38
P07      5  63  2   work during weekends
   -1 - no data available due to interviewers
    0 - mistake
    1 - yes, regularly
    2 - yes, occasionally
    3 - no
   11 - mistake
P081     5  66  2   first reason of occupational activity
   -1 - no data available due to interviewers
    0 - mistake
    1 - adults ought to work
    2 - I wanted to secure my family for maintenance sources
    3 - I wanted to increase material standard
    4 - my own occupation and income made me feel independent
    5 - was interested in my job
    6 - I wanted to use my professional qualifications
    7 - other reasons
P082     5  69  2   second reason of occupational activity
   -1 - no data available due to interviewers
    0 - does not apply,  no second reason
    1 - adults ought to work
    2 - I wanted to secure my family for maintenance sources
    3 - I wanted to increase material standard
    4 - my own occupation and income made me feel independent
    5 - was interested in my job
    6 - I wanted to use my professional qualifications
    7 - other reasons
P083     5  72  2   third reason of occupational activity
   -1 - no data available due to interviewers
    0 - does not apply, no third reason
    1 - adults ought to work
    2 - I wanted to secure my family for maintenance sources
    3 - I wanted to increase material standard
    4 - my own occupation and income made me feel independent
    5 - I was interested in my job
    6 - I wanted to use my professional qualifications
    7 - other reasons
```

```
    9 - mistake
P09      5  75  2   main reason of occupational activity
   -1 - no data available due to interviewers
    0 - mistake
    1 - adults ought to work
    2 - I wanted to secure my family for maintenance sources
    3 - I wanted to increase material standard
    4 - my own occupation and income made me feel independent
    5 - I was interested in my job
    6 - I wanted to use my professional qualifications
    7 - other reasons
    9 - mistake
```

A.6 Inactivity Spells (ankb32.ds)

The variables described in the present section belong to data file **ankb32.ds**.

```
B32PID   6   0  6   person ID number
B32HHID  6   7  4   household  ID number
B32NRA   6  12  4   number of questionnaire
B32SGO   6  17  9   household identification number
B32TER   6  27  6   territorial symbol
B32KLM   6  34  1   category of place of residence
    0 - urban -  200,000+ inhabitants
    1 - urban -  100,000- 199,999 inhabitants
    2 - urban -   50,000-  99,999 inhabitants
    3 - urban -   20,000-  49,999 inhabitants
    4 - urban -   10,000-  19,999 inhabitants
    5 - urban -    5,000-   9,999 inhabitants
    6 - urban -  < 5,000 inhabitants
    9 - rural
B32NRO   6  36  2   rank number of person
    lower limit: 1,  upper limit: 12
B32NRK   6  39  2   sequence number of record for person
    lower limit: 1,  upper limit: 6
P10M     6  42  2   month of staring occupational inactivity
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    lower limit: 1,  upper limit: 12
P10Y     6  45  2   year of staring occupational inactivity
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    1 - mistake
    lower limit: 44,  upper limit: 91
P111     6  48  2   first reason of inactivity
   -2 - no data available due to respondents
    0 - mistake
    1 - dissolution of work contract
    2 - I couldn't find an interesting job
    3 - I hadn't any sufficient qualifications
    4 - I was learning/studying
    5 - I was raising children
    6 - I only wanted to do housework
```

```
    7 - health troubles of child(ren)
    8 - health troubles of family member
    9 - my own health troubles
   10 - other reasons
P112     6  48  2   second reason of inactivity
    0 - does not apply, no second reason
    2 - I couldn't find any interesting job
    3 - I hadn't any sufficient qualifications
    5 - I was raising children
    6 - I only wanted to do housework
    7 - health troubles of child(ren)
    8 - health troubles of family member
    9 - my own health troubles
   10 - other reasons
P113     6  54  2   third reason of inactivity
   -1 - no data available due to interviewers
    0 - does not apply, no third reason
    6 - I only wanted to do housework
    7 - health troubles of child(ren)
    8 - health troubles of family member
   10 - other reasons
P12      6  57  2   main reason of inactivity
   -1 - no data available due to interviewers
    0 - mistake
    1 - dissolution of work contract
    2 - I couldn't find any interesting job
    3 - I hadn't any sufficient qualifications
    4 - I was learning/studying
    5 - I was raising children
    6 - I only wanted to do housework
    7 - health troubles of child(ren)
    8 - health troubles of family member
    9 - my own health troubles
   10 - other reasons
P131     6  60  2      first source of maintenance
   -1 - no data available due to interviewers
    0 - mistake
    1 - savings
    2 - unemployment benefit
    3 - rent
    4 - stipend
    5 - maintained by husband/wife
    6 - maintained by parents/parents-in-law
    7 - irregular work
    8 - other
P132     6  63  2     second source of maintenance
   -1 - no data available due to interviewers
    0 - does not apply, no second source
    2 - unemployment benefit
    3 - rent
    4 - stipend
    5 - maintained by husband/wife
    6 - maintained by parents/parents-in-law
    7 - irregular work
    8 - other
 P133    6  66  2   third source of maintenance
```

```
   -1 - no data available due to interviewers
    0 - does not apply, no third source
    1 - savings
    3 - rent
    5 - maintained by husband/wife
    6 - maintained by parents/parents-in-law
    7 - irregular work
    8 - other
```

A.7 Regional Mobility (ankb4.ds)

The variables described in the present section belong to data file **ankb4.ds**.

```
B4PID    7   0  6   person ID number
B4HHID   7   7  4   household  ID number
B4NRA    7  12  4   number of questionnaire
B4SGO    7  17  9   household identification number
B4TER    7  27  6   territorial symbol
B4KLM    7  34  1   category of place of residence
    0 - urban -  200,000+ inhabitants
    1 - urban -  100,000- 199,999 inhabitants
    2 - urban -   50,000-  99,999 inhabitants
    3 - urban -   20,000-  49,999 inhabitants
    4 - urban -   10,000-  19,999 inhabitants
    5 - urban -    5,000-   9,999 inhabitants
    6 - urban -  < 5,000 inhabitants
    9 - rural
B4NRO    7  36  2   rank number of person
    lower limit: 1,  upper limit: 12
B4NRK    7  39  2   sequence number of record for person
    lower limit: 1,  upper limit: 9
B4PO1M   7  42  2   month of moving
   -1 - no data available due to interviewers
    0 - mistake
    lower limit: 1,  upper limit: 12
B4PO1Y   7  45  2   year of moving
   -1 - no data available due to interviewers
    0 - mistake
    lower limit: 37,  upper limit: 91
B4PO2    7  48  2   category of municipality
   -1 - no data available due to interviewers
    0 - mistake
    1 - town of more than 100 thousand
    2 - town of 20-100 thousand
    3 - town of less than 20 thousand
    4 - village
   20 - mistake
   53 - mistake
   80 - mistake
B4PO3    7  51  2   main reason for moving
   -1 - no data available due to interviewers
    0 - mistake
    1 - birth
    2 - change of parents' municipality residence
    3 - learning / studying
```

```
    4 - marriage, family
    5 - occupational activity, undertaking own economic activity
    6 - change of spouse's workplace
    7 - housing change
    8 - environmental, climatic and health conditions
    9 - other reasons
   10 - mistake
```

A.8 Residential Mobility (ankb5.ds)

The variables described in the present section belong to data file **ankb5.ds**.

```
B5PID    8   0  6   person ID number
B5HHID   8   7  4   household  ID number
B5NRA    8  12  4   number of questionnaire
B5SGO    8  17  9   household identification number
B5TER    8  27  6   territorial symbol
B5KLM    8  34  1   category of place of residence
    0 - urban -  200,000+ inhabitants
    1 - urban -  100,000- 199,999 inhabitants
    2 - urban -   50,000-  99,999 inhabitants
    3 - urban -   20,000-  49,999 inhabitants
    4 - urban -   10,000-  19,999 inhabitants
    5 - urban -    5,000-   9,999 inhabitants
    6 - urban -  < 5,000 inhabitants
    9 - rural
B5NRO    8  36  2   rank number of person
    lower limit: 1,  upper limit: 12
B5NRK    8  39  2   sequence number of record for person
    lower limit: 1,  upper limit: 10
B5P01M   8  42  2   month of starting residence
   -1 - no data available due to interviewers
    0 - mistake
    lower limit: 1,  upper limit: 12
B5P01Y   8  45  2   year of starting residence
   -1 - no data available due to interviewers
    0 - mistake
   12 - mistake
    lower limit: 37,  upper limit: 91
B5P02    8  48  3   total area of dwelling
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply
    lower limit: 4,  upper limit: 475
B5P03    8  52  3   area occupied by household
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply
    lower limit: 2,  upper limit: 475
B5P04    8  56  2   total number of rooms in dwelling
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply
   63 - mistake
    lower limit: 1,  upper limit: 16
```

```
B5P05    8  59  2   total number of rooms occupied by household
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply
   50 - mistake
   60 - mistake
    lower limit: 1,  upper limit: 16
B5P06    8  62  2   number of persons residing in dwelling
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply
    lower limit: 1,  upper limit: 19
B5P07    8  65  2   ownership of dwelling
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply
    1 - owned
    2 - rented
    3 - shared with other households
    4 - other possibility
    5 - hotel, bursa, dormitory
```

A.9 Fertility and Children (ankb6.ds)

The variables described in the present section belong to data file **ankb6.ds**.

```
B6PID    9   0  6   person ID number
B6HHID   9   7  4   household  ID number
B6NRA    9  12  4   number of questionnaire
B6SGO    9  17  9   household identification number
B6TER    9  27  6   territorial symbol
B6KLM    9  34  1   category of place of residence
    0 - urban -  200,000+ inhabitants
    1 - urban -  100,000- 199,999 inhabitants
    2 - urban -   50,000-  99,999 inhabitants
    3 - urban -   20,000-  49,999 inhabitants
    4 - urban -   10,000-  19,999 inhabitants
    5 - urban -    5,000-   9,999 inhabitants
    6 - urban -  < 5,000 inhabitants
    9 - rural
B6NRO    9  36  2   rank number of person
    lower limit: 1,  upper limit: 10
B6NRK    9  39  2   sequence number of record for person
    lower limit: 1,  upper limit: 10
B6P10M   9  42  2   month of pregnancy end
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    lower limit: 1,  upper limit: 12
B6P10R   9  45  2   year of pregnancy end
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    8 - mistake
    lower limit: 44,  upper limit: 92
```

```
B6P11    9  48  2   number of months of pregnancy duration
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    lower limit: 1,  upper limit: 9
B6P12    9  51  2   pregnancy wanted or not
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    1 - yes, and it happened at the right time
    2 - yes, but it happened too early
    3 - yes, but it happened too late
    4 - no
    5 - it is difficult to say
B6P13    9  54  2   contraceptive use before pregnancy
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    1 - no contraceptive use because of pregnancy intention
    2 - no contraceptive use without pregnancy intention
    3 - wrong contraceptive use or risk
    4 - non-effective methods of contraception
    5 - other
B6P14    9  57  2   pregnancy outcome
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    1 - live birth
    2 - still birth
    3 - miscarriage
    4 - induced abortion
    6 - mistake
B6P15        9  60  2   time of delivery
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply, other than live birth
    1 - at right time
    2 - too early
    3 - too late
    4 - I don't know, I don't remember
   33 - mistake
B6P16    9  63  2   type of delivery
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply, other than live birth
    1 - no delivery interventions
    2 - forceps delivery
    3 - vacuum extraction
    4 - cesarean section
    5 - other
   33 - mistake
B6P17    9  66  2   delivery single, twins or triplet
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake - does not apply, other than live birth
    1 - single
```

```
    2 - twins
   33 - mistake
B6P18    9  69  2   participation in delivery school
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply, other than live birth
    1 - yes
    2 - no
B6P191   9  72  2   first factor determining birth of subsequent children
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply , other than live birth
    1 - I wanted to have a child
    2 - child is very important for the couple and completes the family
    3 - child brings husband and wife closer together
    4 - child brings joy and love
    5 - child helps carry on family name
    8 - I wanted to have a large family
    9 - I didn't use any contraception or contraception failed
   10 - I wanted to have a child with my second (third) partner
   11 - other
B6P192   9  75  2   second factor determining birth of subsequent children
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply, no second factor
    1 - I wanted to have a child
    2 - child is very important for the couple and completes the family
    3 - child brings husband and wife closer together
    4 - child brings joy and love
    5 - child helps carry on family name
    6 - it was better for my child to have a companion
    7 - I wanted to have a child of a different sex
    8 - I wanted to have a large family
    9 - I didn't use any contraception or contraception failed
   10 - I wanted to have a child with my second (third) partner
   11 - other
B6P193   9  78  2   third factor determining birth of subsequent children
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply, no third factor
    1 - I wanted to have a child
    3 - child brings husband and wife closer together
    4 - child brings joy and love
    5 - child helps carry on family name
    6 - it was better for my child to have a companion
    7 - I wanted to have a child of different sex
    8 - I wanted to have a large family
    9 - I didn't use any contraception or contraception failed
   10 - I wanted to have a child with my second (third) partner
   11 - other
B6P20    9  81  2   main factor determining birth of subsequent children
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply
    1 - I wanted to have a child
    2 - child is very important for the couple and completes the family
```

```
    3 - child brings husband and wife closer together
    4 - child brings joy and love
    5 - child helps carry on family name
    6 - it was better for my child to have a companion
    7 - I wanted to have a child of a different sex
    8 - I wanted to have a large family
    9 - I didn't use any contraception or contraception failed
   10 - I wanted to have a child with my second (third) partner
   11 - other
B6P21    9  84  2   sex of child
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply,  other than live birth
    1 - son
    2 - daughter
B6P22    9  87  4   birthweight in grams
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply, other than live birth
    lower limit: 600,  upper limit: 5860
    REMARKS:
    1 - 500 - mistake
     9999 - mistake
B6P23    9  92  2   child still alive
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply,other than live birth
    1 - yes
    2 - no
B6P24M   9  95  2   month of child's death
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply, other than live birth or child still alive
    lower limit: 1,  upper limit: 12
B6P24R   9  98  2   year of child's death
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply, other than live birth or child still alive
    lower limit: 57,  upper limit: 91
B6P25    9 101  2   reason of child's death
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply
    1 - prematurity
    2 - congenital defect
    3 - illnesses of breathing system
    4 - illnesses of alimentary canal
    5 - illnesses of circulatory system
    6 - illnesses of nervous system
    7 - tumor
    8 - accident
    9 - other
B6P26    9 104  8   forms of childcare
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply
```

```
    1 - nursery
    2 - kindergarten
    3 - paid help
    4 - relatives
    REMARKS:
    data should be disaggregated: see B6P261 - B6P264
B6P261   9 104  2   nursery
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply, other than live birth
    1 - yes
    2 - no
B6P262   9 106  2   kindergarten
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply, other than live birth
    1 - yes
    2 - no
B6P263   9 108  2   paid help
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply, other than live birth
    1 - yes
    2 - no
B6P264   9 110  2   relatives
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply, other than live birth
    1 - yes
    2 - no
B6P27    9 113  2   child in school
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply
    1 - yes
    2 - no
B6P28    9 116  2   type of school
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply
    1 - primary school
    2 - vocational school
    3 - secondary general school
    4 - secondary professional school
    5 - extramural school
    6 - higher school
B6P29    9 119  2   child's employment
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply
    1 - yes
    2 - no
    3 - mistake
B6P30M   9 122  2   month of child's first job
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
```

```
    0 - does not apply
    lower limit: 1,  upper limit: 12
B6P30R   9 125  2   year of child's first job
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    1 - mistake
    lower limit: 64,  upper limit: 91
B6P31    9 128  2   child living in the household or not
   -1 - no data available due to interviewers
    0 - does not apply
    1 - yes
    2 - no
    5 - mistake
B6P321M  9 131  2   month of first leaving parental home
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply
    lower limit: 1,  upper limit: 12
B6P321R  9 134  2   year of first leaving parental home
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply
    lower limit: 64,  upper limit: 91
B6P322M  9 137  2   month of last leaving parental home
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply
    lower limit: 1,  upper limit: 12
B6P322R  9 140  2   year of last leaving parental home
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply
    lower limit: 69,  upper limit: 91
B6P33    9 143  2   main reason for leaving parental home
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply
    1 - education
    2 - job
    3 - separate dwelling
    4 - entering marriage
    5 - living with another person
    6 - going abroad
    8 - other
B6P34    9 146  2   category of child's place of residence
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply
    1 - lives with grandparents
    2 - lives with relatives
    3 - lives in a student hostel, lodge, room
    4 - lives at a hotel
    5 - lives in her/his own flat
    6 - lives in a rented flat
    7 - lives with parents, but runs a separate household
```

```
    8 - other
```

A.10 Partnerships (ankb7.ds)

The variables described in the present section belong to data file **ankb7.ds**.

```
B7PID   10   0  6   person ID number
B7HHID  10   7  4   household  ID number
B7NRA   10  12  4   number of questionnaire
B7SGO   10  17  9   household identification number
B7TER   10  27  6   territorial symbol
B7KLM   10  34  1   category of place of residence
    0 - urban -  200,000+ inhabitants
    1 - urban -  100,000- 199,999 inhabitants
    2 - urban -   50,000-  99,999 inhabitants
    3 - urban -   20,000-  49,999 inhabitants
    4 - urban -   10,000-  19,999 inhabitants
    5 - urban -    5,000-   9,999 inhabitants
    6 - urban -  < 5,000 inhabitants
    9 - rural
B7NRO   10  36  2   rank number of person
    lower limit:  1,   upper limit:  10
B7NRK   10  39  2   sequence number of record for person
    lower limit:  1,   upper limit:  9
B7PO4   10  42  2   form of partnership
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    1 - friendship
    2 - engagement
    3 - cohabitation, living together
    4 - cohabitation living apart together
    5 - marriage
    6 - other
B7PO5M  10  45  2   month of partnership start
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    lower limit:  1, upper limit:  12
B7PO5R  10  48  2   year of partnership start
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply
    1 - mistake
    6 - mistake
    lower limit:  44,   upper limit:  91
B7PO6   10  51  2   marital status of respondent at partnership start
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    1 - single
    2 - married (formal)
    3 - married (informal)
    4 - widower (widow)
    5 - separated
```

```
    6 - divorced
B7P07   10  54  2   marital status of your partner on the day of partnership start
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    1 - single
    2 - married (formal)
    3 - married (informal)
    4 - widower (widow)
    5 - separated
    6 - divorced
B7P08   10  57  2   age of partner at partnership start
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - 10 mistakes
    lower limit:  11,   upper limit:  58
B7P09   10  60  2   children of partner at partnership start
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    1 - yes
    2 - no
B7P10   10  63  2   number of partner's children
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    lower limit:  1,   upper limit:  6
B7P111  10  66  2   first factor determining partnership start
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    1 - love
    2 - partner was (is) very attractive
    3 - sexual interest
    4 - I wish to have my own family
    5 - I wish to be independent
    6 - I wish to leave parental home
    7 - mutual interest and fondness
    8 - I feel secure with partner
    9 - dissatisfaction with previous partner
   10 - family problems after partner's leaving
   11 - I wish to have a child
   12 - pregnancy
   13 - material reasons
   14 - other
B7P112  10  69  2   second factor determining partnership start
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply, no second factor
    1 - love
    2 - partner was (is) very attractive
    3 - sexual interest
    4 - I wish to have my own family
    5 - I wish to be independent
    6 - I wish to leave parental home
    7 - mutual interest and fondness
```

```
    8 - I feel secure with partner
    9 - dissatisfaction with previous partner
   10 - family problems after  partner's leaving
   11 - I wish to have a child
   12 - pregnancy
   13 - material reasons
   14 - other
B7P113  10  72  2   third factor determining partnership start
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply, no third factor
    1 - love
    2 - partner was (is) very attractive
    3 - sexual interest
    4 - I wish to have my own family
    5 - I wish to be independent
    6 - I wish to leave parental home
    7 - mutual interest and fondness
    8 - I feel secure with partner
    9 - dissatisfaction with previous partner
   10 - family problems after  partner's leaving
   11 - I wish to have a child
   12 - pregnancy
   13 - material reasons
   14 - other
B7P121  10  75  2   first activity at partnership start
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    1 - employed
    2 - learning / studying
    3 - unemployed
    4 - not learning / not studying
    5 - disability pension, other maintenance source from unpaid job
    6 - maintained by partner
    7 - maintained by parents / parents-in-law
    8 - other
B7P122  10 78 2 second activity at partnership start
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply, no second activity
    1 - employed
    2 - learning / studying
    3 - unemployed
    4 - not learning / not studying
    5 - disability pension, other maintenance source from unpaid job
    6 - maintained by partner
    7 - maintained by parents / parents-in-law
    8 - other
B7P123  10  81  2   third activity at partnership start
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply, no third activity
    1 - employed
    2 - learning / studying
    3 - unemployed
```

```
    4 - not learning / not studying
    5 - disability pension, other maintenance source from unpaid job
    6 - maintained by partner
    7 - maintained by parents / parents-in-law
    8 - other
B7P13   10  84  2   living together with partner
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    1 - yes
    2 - no
    3 - mistake
B7P14M  10  87  2   month of starting to living together
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply
    lower limit:  1,   upper limit:  12
B7P14R  10  90  2   year of starting of living together
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply
    lower limit:  46,   upper limit:  91
B7P15   10  93  2   intimate relationship
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - mistake
    1 - yes
    2 - no
    3 - it is my matter
B7P16   10  96  2   number of pregnancies in partnership
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 -  no pregnancy
   33 - it is my matter
    lower limit:  1,   upper limit  11
B7P17   10  99  2   number of live born children in partnership
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply
    lower limit:  1,   upper limit: 10
   20 - mistake
   33 - it is my matter
   66 - mistake
   68 - mistake
   85 - mistake
   91 - mistake
B7P18M  10 102  2   month of partnership end
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply
    lower limit:  1,   upper limit:  12
B7P18R  10 105  2   year of partnership end
   -2 - no data available due to respondents
   -1 - no data available due to interviewers
    0 - does not apply
    lower limit:  45,   upper limit:  91
```

B7P19 10 108 2 type of partnership end
-2 - no data available due to respondents
-1 - no data available due to interviewers
0 - does not apply
1 - change of relationship form
2 - leave-taking
3 - separation
4 - divorce
5 - partner's death
6 - other

B7P201 10 111 2 first reason of partnership end
-2 - no data available due to respondents
-1 - no data available due to interviewers
0 - does not apply
1 - change of relationship form
2 - unfaithfulness
3 - steady relationship with other person
4 - disagreements concerning everyday problems
5 - lack of interest in family life
6 - lack of children or aversion to having them
7 - partner was violent
8 - alcoholism
9 - drug addiction
10 - illness or disability of respondent (partner)
11 - illness or disability of child
12 - unsatisfactory sexual relationship
13 - housing difficulties
14 - misunderstandings concerning finances difficulties
15 - difference of mutual opinions
16 - partner's death
17 - other

B7P202 10 114 2 second reason of partnership end
-2 - no data available due to respondents
-1 - no data available due to interviewers
0 - does not apply
1 - change of relationship form
2 - unfaithfulness
3 - steady relationship with other person
4 - disagreements concerning everyday problems
5 - lack of interest in family life
6 - lack of children or aversion to having them
7 - partner was violent
8 - alcoholism
9 - drug addiction
10 - illness or disability of respondent (partner)
12 - unsatisfactory sexual relationship
13 - housing difficulties
14 - misunderstanding concerning finances
15 - differences of mutual opinions
17 - other

B7P203 10 117 2 third reason of partnership end
-2 - no data available due to respondents
-1 - no data available due to interviewers
0 - does not apply
1 - change of relationship form

```
 4 - disagreements concerning everyday problems
 5 - lack of interest in family life
 6 - lack of children or aversion to having them
 7 - partner was violent
 8 - alcoholism
 9 - drug addiction
12 - unsatisfactory sexual relationship
13 - housing difficulties
14 - misunderstanding concerning finances
15 - differences of mutual opinions
17 - other
```